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Civil Engineering

**WORKING IN THE RESOURCES FLIGHT
FUNCTIONS AND ORGANIZATION**

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This volume in this pamphlet series provides an overview of the tasks accomplished in the Resources Flight and detailed guidance for administrative and training tasks common to all areas within the flight. This pamphlet series supports AFI 32-9002, *Use of Real Property Facilities*, as the AFI which implements AFPD 32-90, *Real Property Management*.

RESOURCES FLIGHT MASTER TABLE OF CONTENTS

Volume 1 Functions and Organization	1
Volume 2 Real Estate Management	2
Volume 3 Financial Management.....	4
Volume 4 Manpower Management	7
Volume 5 Information Systems Management	8

VOLUME 1 FUNCTIONS AND ORGANIZATION

Chapter 1 Introduction to the Resources Flight.....	10
1.1 Overview	10
1.2 History	11
1.3 The Objective Squadron	11
1.4 Manpower and Organization	12
Chapter 2 Real Estate Management.....	13
2.1 Major Tasks	13
2.2 Basic Functions.....	13
2.3 The Real Property Management Process	13
2.4 Summary of Real Estate Management Element	14
Chapter 3 Financial Management	15
3.1 Basic Responsibilities	15
3.2 Summary of Financial Management.....	16
Chapter 4 Manpower Management	17
4.1 Basic Responsibilities	17

4.2	Mission	18
4.3	Personnel Document Management	19
4.4	Manpower Analysis	19
4.5	Summary of Manpower Management	20
Chapter 5	Information Systems Management	21
5.1	Planning	22
5.2	Operation	22
5.3	Maintenance	23
5.4	Inventory	24
5.5	Training	24
5.6	Management Interfaces	24
5.7	Summary of Information Systems Management	24

List of Figures and Tables

Figure 1.	Resources Flight	11
Figure 2.	Standard Resources Flight Configuration at Large Bases	12
Figure 3.	Real Property Management	14
Figure 4.	Manpower Process.	18

List of Attachments

Attachment 1	Sample Resources Flight Chief Position Description	25
Attachment 2	Glossary of References and Supporting Information	32
Attachment 3	Core Requirements — All Flight Elements	49

VOLUME 2 REAL ESTATE MANAGEMENT

Chapter 1	References	5
1.1	Applicable Guidelines	5
1.2	Applicable Forms	5
Chapter 2	Definitions	6
Chapter 3	Real Estate Principles	14
3.1	Contract	14
3.2	Legal Descriptions of Real Estate	14
3.3	Interests in Real Estate	20
3.4	Real Estate Law	28
3.5	Appraisal	32
Chapter 4	Roles and Responsibilities	34
4.1	Base-level Team	34
4.2	External Agencies	36
4.3	Real Estate Project Approval	38
Chapter 5	Management Responsibilities	46
Chapter 6	Acquisition	49
6.1	Acquisition Programs	49
6.2	Funding Sources	50
6.3	Acquisition Process	50

6.4	Environmental Issues	51
6.5	Acquisition of Real Property in Foreign Countries	52
6.6	Types and Uses of Lesser Interests	53
6.7	Tracking Real Property Interest	75
6.8	Acquisition Responsibilities	75
Chapter 7	Retention and Use.....	78
Chapter 8	Granting Temporary Use	80
8.1	Outgranting Requirements	80
8.2	Leasing to Financial Institutions and the Post Office	88
8.3	Preparing the Instrument.....	93
8.4	Outgranting Responsibilities.....	96
Chapter 9	Disposal.....	97
9.1	Disposal of Real Estate	97
9.2	Base Closures	100
9.3	Disposal Reporting.....	103
Chapter 10	Support Agreements.....	105
10.1	Real Estate Instruments.....	105
10.2	Definitions.....	105
10.3	Responsibilities and Procedures	106
Chapter 11	Real Property Accounting	110
11.1	Real Property Records	110
11.2	GLACs and Inventory Codes.....	111
11.3	Accounting Procedures	114
11.4	Analyzing Work Orders.....	115
11.5	Vouchering in WIMS.....	119
Chapter 12	WIMS Software	120
12.1	Working with WIMS	120
12.2	Data Files	121
12.3	Updating Records in WIMS.....	122
12.4	Learning WIMS	128
12.5	The Future.....	130
Chapter 13	Commander's Facility Assessment (CFA).....	131
13.1	Three Levels of Data Collection	131
13.2	Benefits of CFA	132
13.3	Real Property Management.....	133
13.4	CFA Responsibilities	134
13.5	Facility Record.....	136
Chapter 14	Real Estate Training and Professional Development.....	137
14.1	Career Field.....	137
14.2	Career Progression	137
14.3	Career Training	138
14.4	Private Sector Associations.....	139
Chapter 15	Negotiating	142
15.1	The Negotiating Process	142
15.2	Ten Key Concepts.....	142
15.3	Negotiating Styles.....	144

15.4	Funnel Technique.....	144
Chapter 16	Environmental Documentation	147
16.1	NEPA	147
16.2	Environmental Baseline Survey (EBS).....	148
16.3	Conformity Determination.....	149

List of Figures and Tables

Figure 1.	Metes-and-Bounds Description	16
Figure 2.	Principal Meridian and Base Line	17
Figure 3.	Township Showing 36 Sections	17
Figure 4.	Measurements.....	19
Figure 5.	Sample Warranty Deed.....	25
Figure 6.	Real Estate Decision-makers	36
Figure 7.	Real Property Management Process.....	48
Figure 8.	Base Functions of Real Property Management	48
Figure 9.	Sample In-lease Document.....	61
Figure 10.	Sample In-lease Supplement Document.....	67
Figure 11.	Sample License.....	70
Figure 12.	Sample Right-of-Entry	76
Figure 13.	Sample Outgrant by Lease.....	82
Figure 14.	Sample Outgrant by Easement	89
Figure 15.	General Ledger Accounts and Inventory Codes.....	113
Figure 16.	Flow of Info between CE and DFAS	118
Figure 17.	RP WIMS Software Menu Structure.....	122
Figure 18.	Real Property Record (Screen 1).....	123
Figure 19.	Real Property Record (Screen 2).....	124
Figure 20.	Real Property Reports Menu	125
Figure 21.	Real Property Year-end Menu.....	126
Figure 22.	Real Property Inventory Reports Menu.....	127
Figure 23.	Real Property In/Outgrant Reports Menu.....	128
Figure 24.	The Funnel Technique	145
Table 1.	Real Estate Project Approval and Execution Levels	41
Table 2.	Acquisition Rules.....	50
Table 3.	Air Force Real Property Interest Codes.....	77
Table 4.	Environmental Documentation Matrix	148

List of Attachments

Attachment 1	List of Acronyms.....	151
Attachment 2	Sample Documents for Real Property Management	153

VOLUME 3 FINANCIAL MANAGEMENT

Chapter 1	Planning, Programming, and Budgeting System (PPBS).....	7
1.1	PPBS Process	8
1.2	Common Air Force Appropriations	10
Chapter 2	Operations and Maintenance Funds	13
2.1	O&M Structure	13
2.2	Program Elements (PE).....	15

2.3	DOD Functional Categories.....	17
2.4	Funds Citation and Accounting Classification	21
2.5	Resource Management System	22
Chapter 3	Military Family Housing (MFH) Funds	24
3.1	Family Housing Construction	24
3.2	Family Housing Operations and Maintenance.....	26
Chapter 4	Military Construction (MILCON) Funds.....	34
4.1	Appropriation/ Fund Code	34
4.2	Budget Programs and Projects	34
Chapter 5	Environmental Funds	38
5.1	Installation Restoration	38
5.2	Environmental Compliance (EC).....	39
5.3	Pollution Prevention.....	41
5.4	Conservation	42
Chapter 6	Procurement Funding.....	44
Chapter 7	Revolving Funds.....	47
Chapter 8	Other Funds.....	49
8.1	BRAC.....	49
8.2	Non-appropriated Funds	52
8.3	Research, Development, Test and Evaluation	52
8.4	Prior Year Funds	53
Chapter 9	Budget Formulation Process	54
9.1	Requirements Development and Validation	55
9.2	Activity Level Analysis	57
9.3	Determining the Commodity or Resource Mix	59
9.4	Determining the Level of Resources Required	60
9.5	Determining Dollars Required.....	60
9.6	Determining Total Product or Service Costs	60
Chapter 10	Financial Plan Format and Terms	62
10.1	Financial Plan Organization.....	62
10.2	Formatting a Financial Plan	68
10.3	Prioritizing Programs (Products and Services)	69
10.4	Dealing With the Fiscal Constraint (Bogey).....	69
10.5	Determining Impacts.....	69
10.6	Preparing Unfunded Requirement Narratives.....	70
10.7	Narration of Deltas.....	72
10.8	Preparation of the Commander's Statement	72
10.9	Financial Plan Time Lines	72
10.10	Time-saving Tips	74
10.11	Micro-BAS & the Fin Plan	75
Chapter 11	Military Family Housing Financial Plan	76
Chapter 12	Initial Distribution and Allocation	77
Chapter 13	Stages of Spending & Terms.....	79
Chapter 14	Financial Data Flow.....	85
14.1	Work Order System	85
14.2	Project by Contract Management System.....	90

14.3	Civil Engineer Material Acquisition System	91
14.4	Financial Subsystem	92
Chapter 15	Cost Accounting System	95
15.1	Account Code Hierarchy.....	95
15.2	WIMS Cost Accounting Process	99
15.3	Military Family Housing Cost Accounting.....	100
15.4	Cost Accounting Summary	102
15.5	References.....	102
Chapter 16	Financial Feedback and Reports	103
16.1	Feedback Products	103
16.2	BQ Feedback Products.....	103
16.3	Feedback Products From Base Supply	108
16.4	Feedback Products from WIMS.....	108
Chapter 17	Managing Funding Documents, Funds Requests, and Working With the FWG.....	111
17.1	Funding Documents	111
17.2	Funding Requests (Unfunded Requirements).....	112
17.3	Financial Working Group Participation.....	114
Chapter 18	Reimbursements and Refunds.....	115
18.1	Reimbursement Concept.....	115
18.2	Refund Concept	122
18.3	Future Implications	128
Chapter 19	Shop Rates	129
19.1	Shop Rate Components.....	129
19.2	Shop Rate Costs and Categories	135
19.3	Shop Rate Calculation.....	139
19.4	Shop Rate Reports.....	140
19.5	Shop Rate Validation and Maintenance.....	146
19.6	Labor Accounting and Shop Rates	157
Chapter 20	Logistics and Supplies	165
20.1	Supply Locations	167
20.2	Ordering Materials through CEMAS.....	170
20.3	CEMAS Funding Process	177
20.4	P2T Material Distribution.....	181
Chapter 21	Utilities and Utility Sales Management.....	185
21.1	Base Utility Responsibilities.....	185
21.2	Utility Invoices.....	186
21.3	Rate Increases	186
21.4	Supply and Sale of Utilities	187
Chapter 22	O&M Support of Non-appropriated Fund Activities.....	193
22.1	MWR Support Categories.....	193
22.2	Support for Remote and Isolated Locations.....	194
22.3	Funding Policies — Construction, Maintenance, and Repair.....	194
22.4	Reporting Requirements	195
Chapter 23	General Officers' Quarters Reporting.....	197
23.1	General Officer Quarters Cost Report (PCN SF100-453)	198
23.2	DD Form 2405, General or Flag Officer Quarters Management Report.....	199

23.3	Responsibilities	199
Chapter 24	Contract Project Funds Management.....	202
24.1	Engineering Delivery Process.....	202
24.2	Funding Sources for Facility Projects.....	206
24.3	What Is Funded.....	206
24.4	Role of PCMS	207
24.5	What is the Role of CE Financial Management.....	208
Chapter 25	Year End Process Management.....	210
25.1	Sources of Year-end Funds.....	210
25.2	Spending Year-end Funds.....	211
25.3	Close-out Procedures	212
25.4	Preparing for Year-end	216
Chapter 26	Budget Decentralization	219
26.1	Types of Costs.....	219
26.2	What to Decentralize.....	219
26.3	How to Decentralize	220
Chapter 27	Managing Travel and TDY Funds	222
Chapter 28	Civilian Pay Management	223
Chapter 29	Cost Control	225
29.1	Cost Control Method	225
29.2	Cost Saving versus Execution.....	227
Chapter 30	Full Cost Visibility	228
Chapter 31	Organizing The Financial Management Function.....	232

VOLUME 4 MANPOWER MANAGEMENT

Chapter 1	Manpower and Organization Office	4
Chapter 2	Manpower Process Overview.....	6
2.1	Manpower vs. Personnel Process	6
2.2	Defining the Steps of the Manpower Process.....	7
Chapter 3	Building a Workload	10
Chapter 4	Contract Manpower Equivalents (CMEs).....	12
4.1	Definition.....	12
4.2	Contracts.....	12
4.3	AFMS	12
Chapter 5	Main Attributes of a Manpower Position	14
5.1	Quantity	14
5.2	Skill14	
5.3	Skill Level.....	16
5.4	Educational Requirements	18
5.5	Funding.....	19
Chapter 6	Air Force Manpower Standards.....	21
6.1	Components	22
6.2	Man-hour Availability and Overload Factors.....	28
6.3	Application and Re-application	30
6.4	CE AFMS	33
Chapter 7	Managing Manpower Documents	35

7.1	Air Force Manpower Standards.....	35
7.2	Unit Manpower Document	35
7.3	Unit Military Personnel Roster (UMPR).....	45
7.4	Unit Civilian Personnel Roster (UCPR).....	45
7.5	Authorization Change Notices (ACN)	48
Chapter 8	Managing Automated Manpower Data	51
8.1	Automated UMD - AUMD.....	51
8.2	Automated Personnel File	52
8.3	Commercially Available Applications	54
Chapter 9	Manpower Analysis	55
9.1	Strength.....	55
9.2	Skills	56
9.3	Experience	57
9.4	Cut Drills	58
9.5	Impact Analysis	59
Chapter 10	Changing the Manpower Set.....	64
10.1	When to Change the UMD	64
10.2	How to Change the UMD (Authorized Change Request)	65
Chapter 11	Civilian Personnel Management.....	68
11.1	Pay Plans, Grades, and Series.....	68
11.2	Hiring.....	70
11.3	Reduction in Force (RIF).....	74
11.4	Performance Appraisals.....	76
11.5	Positions Descriptions	77
11.6	Civilian Personnel Actions	78
11.7	Civil Engineer Career Program (CECP).....	78
Chapter 12	Miscellaneous Manpower Issues.....	79
12.1	Productivity Programs	79
12.2	A-76	84

VOLUME 5 INFORMATION SYSTEMS MANAGEMENT

Chapter 1	Overview.....	3
1.1	Information Systems Basics.....	3
1.2	Planning	4
1.3	Operations	4
1.4	Maintenance	4
1.5	Inventory	4
1.6	Training.....	4
Chapter 2	Information Systems Basics.....	6
2.1	Different Types of Systems	6
2.2	Computer Basics	7
Chapter 3	Planning for Information Systems	10
3.1	Establishing an IS Plan	10
3.2	Request Process	11
Chapter 4	System Operation.....	14
4.1	Organization and Accessibility of System.....	14
4.2	Security and Protection of Software/Hardware	14

4.3	Controlling Data/System Quality and Integrity	15
4.4	Recovering/Restoring and Upgrading Software	15
4.5	Controlling Communications and System Connectivity.....	16
4.6	A Network.....	16
Chapter 5	Maintenance	19
Chapter 6	Inventory.....	20
Chapter 7	Training	21

List of Figures and Tables

Figure 1.	CE Information System Operating Environment	7
Table 1.	Security Protection Classes.....	15

List of Attachments

Attachment 1.	List of Acronyms.....	22
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Chapter 1 Introduction to the Resources Flight

1.1 Overview

This desktop reference manual was created as an integral part of Air Force (AF) flight-specific education in the initial skills course, Introduction to Base Civil Engineering. This edition of Air Force Instruction 32-1010 *Working in the Resources Flight* has some changes in style and content, but its substance stays true to the original objectives of the manual.

First, it is a course textbook for the Resources Flight track of initial skills training. It will be used extensively for classroom instruction, discussion, exercises, and independent study. Second, it is a desktop reference for follow-on use at the duty station. The content emphasizes and focuses on core policy, practices, and procedures in the typical Objective Squadron Resources Flight. This manual contains more material than is covered in the resident course. It also goes beyond necessary preparation for a student to be considered mission ready, the primary goal of initial skills training. The additional material is useful for increasing the depth and breadth of knowledge of the Flight and a handy reference for most situations.

Many procedures used, on a daily basis, are Major Command (MAJCOM) or base unique. They may be the result of different interpretations of policy, rules, and regulations. This manual does not attempt to address many variations and exceptions. Rather, it focuses on core concepts, policy, and procedures and commonly accepted, tried, and proven methods for successfully accomplishing the Flight's mission. Policy, guidance, and the way we do business is a dynamic process and can change abruptly. Every attempt has been made to ensure accuracy and to include the most current information available at the time of printing.

The manual is divided into five volumes:

- Volume 1, Resources Flight Functions and Organization;
- Volume 2, Real Estate Management;
- Volume 3, Financial Management;
- Volume 4, Manpower Management; and
- Volume 5, Information System Management.

1.2 History

The Resources Flight was born out of three separate flights, called branches at the time. These branches were the industrial engineering branch, the funds branch, and the engineering branch.

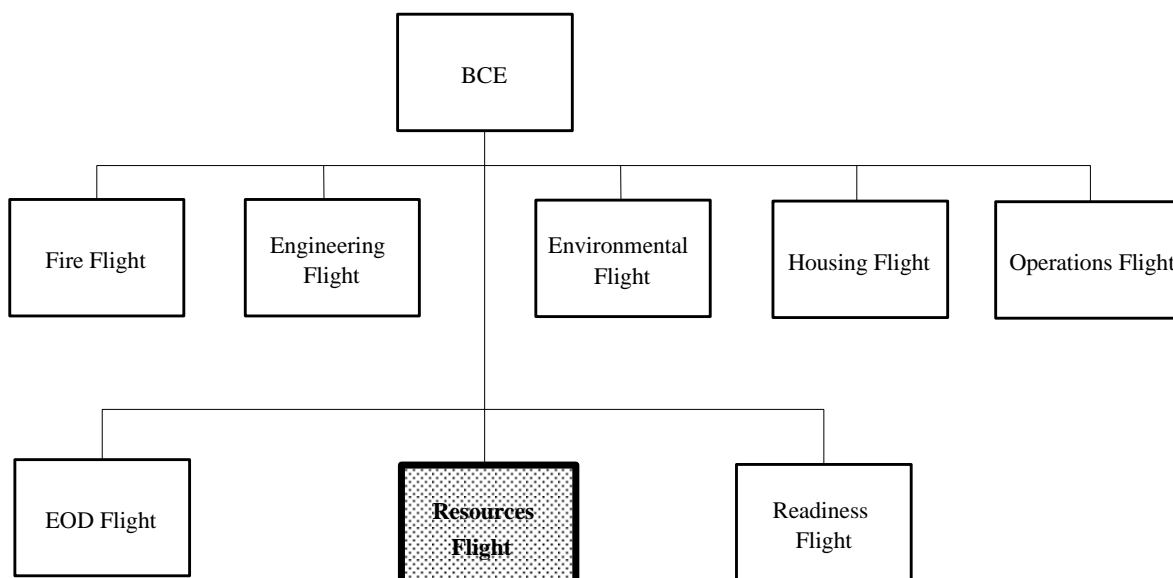
The industrial engineering branch was responsible for manpower, information systems, productivity analysis, and studies. The funds branch was responsible for financial management. The responsibilities of the engineering branch were programming, design, construction management, environment, and real estate. In combining the responsibilities of these three branches, productivity studies was moved to Operations Flight. Maintenance Engineering Function, industrial engineering, funds, and the real estate section of the Engineering Flight became today's Resources Flight.

1.3 The Objective Squadron

The approval and implementation of the Objective Squadron structure developed a basic and standard capability throughout the Air Force. A major concern at all command levels is the ability to meet mission demands in a timely and efficient manner in an era of diminishing resources. Sophisticated weaponry and new technologies continue to be the tail wind pushing the needs for innovative management techniques under austere funding conditions. Imagination, discipline, and foresight, forged with a can-do attitude, create the environment necessary to achieve desired goals.

The Objective Squadron was formed to improve job accomplishment and centralize the work or the mission. The objective was to reduce unnecessary or redundant supervisory positions, multi-craft and multi-skill the workforce, and implement better business-like practices to the process associated with work accomplishment. The reorganization of CE marked a major improvement in the CE structure. Previously, the focus of CE on functions resulted in some inefficiencies. To become more efficient and customer-focused, the new structure consolidates functions and crafts by products, such as readiness, environmental, and resources.

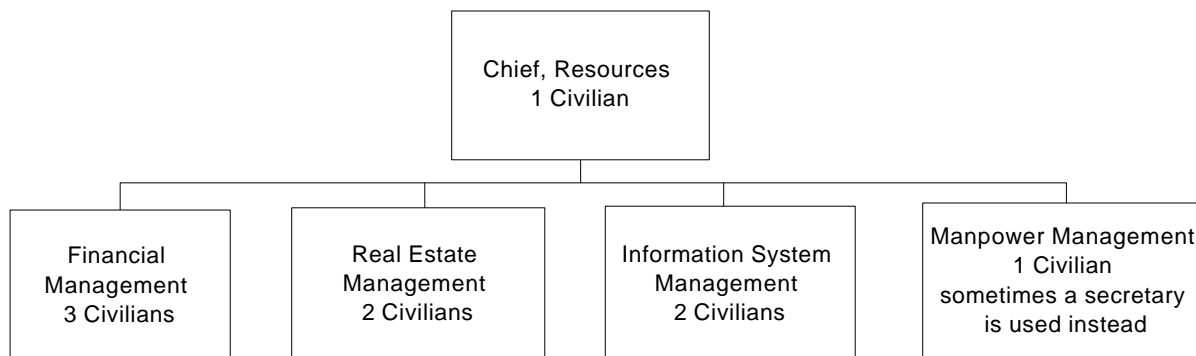
Figure 1. Resources Flight.



1.4 Manpower and Organization

The Resources Flight is divided into four elements at larger bases: financial management, real estate management, information systems management, and manpower management. Smaller bases don't have a manpower section. The Resources Flight chief performs this function as a working supervisor. Some bases have the option to have one military officer in the flight. A sample position description is provided at the back for a typical base civilian Resources Flight Chief.

Figure 2. Standard Resources Flight Configuration at Large Bases.



Chapter 2 Real Estate Management

AFI 32-9002 addresses the major responsibilities in managing real estate. It also identifies the Base Commander as the primary person responsible for the proper management of AF real property.

2.1 Major Tasks

The major responsibilities involved with the management of real property are:

- Retention and optimum use of real property;
- record keeping and reporting;
- performance of various studies;
- annual review of holdings, including
 - ◆ not used,
 - ◆ underutilized (vacant land and buildings), and
 - ◆ not put to optimum use (an economic analysis suggest more efficient uses),
 - ◆ declaration of excess criteria, including
 - ◆ unjustified continued use due to location, size, or maintenance cost,
 - ◆ obsolescence makes renovation or continued maintenance impractical,
 - ◆ resale value is greater than a substitute property, and
 - ◆ high vulnerability of location to attack.

2.2 Basic Functions

There are four basic functions of real property management: (1) acquisition, (2) retention and use, (3) granting temporary use, and (4) disposal. Volume 2 of this manual closely examines each.

2.3 The Real Property Management Process

The process by which the base manages its real property assets is shown in Figure 2, Real Property Management.

The main customers are building managers who are responsible for keeping their facilities in the best condition to support their unit's mission. In this endeavor, building managers generate requirements to acquire more space or to relocate their functions. Facility requirements are validated based on mission needs and the level of support allowed by the support agreements between the base and its tenants.

To accommodate all missions on base, AF real property assets are either upgraded or altered to change the use of the facilities to meet the most urgent mission needs. A

change in use results in a change in the category code of the facility. In addition, new facilities may be built or more land may be purchased to support the mission. New facilities are handled by the Engineering Flight. The acquisition of additional real estate is handled by the Real Estate staff. "The real property accounting system tracks the cost of all efforts to upgrade or change these facilities to meet new and changing missions. This is accomplished by analyzing each work order and preparing vouchers to document the investments in real property assets.

Figure 3. Real Property Management.



2.4 Summary of Real Estate Management Element

The main functions of the Real Estate Element management is acquisition; retention; use; including granting temporary use; and disposal.

Real estate management is accomplished at base level as a team effort. A Real Property Accountable Officer is directly responsible for the real property records. Many are involved in managing real property. Several external agencies play a key role in managing real estate such as MAJCOM, AFREA, AFBCA, COE, and GSA.

Record keeping is perhaps the most important and time-consuming task in real property management. To maintain accurate records of AF real property holdings, the Real Property Officer must analyze completed work orders and projects. When necessary, vouchers prepared accounting for major changes to real property assets are prepared

Chapter 3 Financial Management

The Civil Engineer (CE) Financial Management Function provides the entire squadron with the funds required to accomplish the squadron's mission. The function provides budget expertise, financial planning services, and help with budget execution (spending).

Perhaps the financial manager's most important job is knowing and understanding the structure of the civil engineer budget. To facilitate the accomplishment of the civil engineer objective, the financial manager must know what kind of funds are required and where to go get them. This financial structure mastery becomes very important in the financial planning phase because the proper requirements must be in the proper portion of the increasingly important financial plan.

Good execution of a budget usually starts with a strong, realistic, executable Financial Plan. The Air Force Manpower Standard for the Resources Flight still ranks this as the number one process. This process should get the management attention it deserves. When it's completed, it should be kept readily accessible for use when the initial distribution of funds for next year are received and must be executed.

The Financial Plan is often a missed opportunity for the civil engineer organization. With bogeys and unfundeds, it often is perceived as a financial management game to only be played by financial people. This is CE's only chance to formally tell the base, MAJCOM, and Air Staff what CE does, and how much it costs to do those things. This opportunity shouldn't be lost.

3.1 Basic Responsibilities

Financial management personnel must understand the budget process; create an accurate, useable budget; and execute the budget.

The civil engineer must operate in the Air Force's budgetary system. It is filled with jargon, codes, rules, and exceptions. All CE managers should be familiar with the Federal and Air Force budget systems, but the Resources Flight has its own local experts. Knowledge of this system can financially make or break a CE squadron.

The manpower standard rates the responsibility of budget creation number one for the entire Flight; not just Financial Management. The financial management staff must be able to compile the Flight's budgetary requirements and put them into that financial language the budget office likes to see. They should know how to help managers write strong, credible justification for budget requirements and, then, be able to advocate for the resources through the financial corporate structure.

All the planning that goes into the preparation of a budget will go to waste if the money isn't properly used once it's received. There are dozens of tasks the CE financial staff must manage to ensure efficient, effective execution of CE's budget. If the execution is poor, the losers are customers and the base mission.

3.2 Summary of Financial Management

Money is the lifeblood of any organization. Many different types of Federal funds are needed to carry out the mission. It's important all CE managers understand the budgetary system in which they work. The Resources Flight shouldn't be the only flight that knows about the budget and how to build strong financial plans. Remember, the civil engineer is sometimes responsible for up to 70% of a base's budget. Effective development and execution of the civil engineer budget is absolutely critical to the wing's mission. Take that fact into account as you manage the budget. Be a real member of the flight, squadron, and Wing team.

Chapter 4 Manpower Management

The Air Force attempts to support organizations' missions with manpower by objectively determining manpower requirements and systematically distributing manpower resources. The civil engineer is responsible for a large number of people in over 20 different specialties. The proper use of these resources ensures that the wing and squadron missions are efficiently and effectively accomplished.

Manpower Management staff must have great patience with people attempting to determine their manpower needs. The staff must ensure managers are looking at their long-term, not just immediate, needs.

Understanding the process is of the utmost concern to Manpower Management. The Air Force Manpower Standards (AFMS) allocates a half man-year to the core flight to manage the CE manpower process. At smaller bases, this means the Resources Flight Chief must be a working supervisor.

4.1 Basic Responsibilities

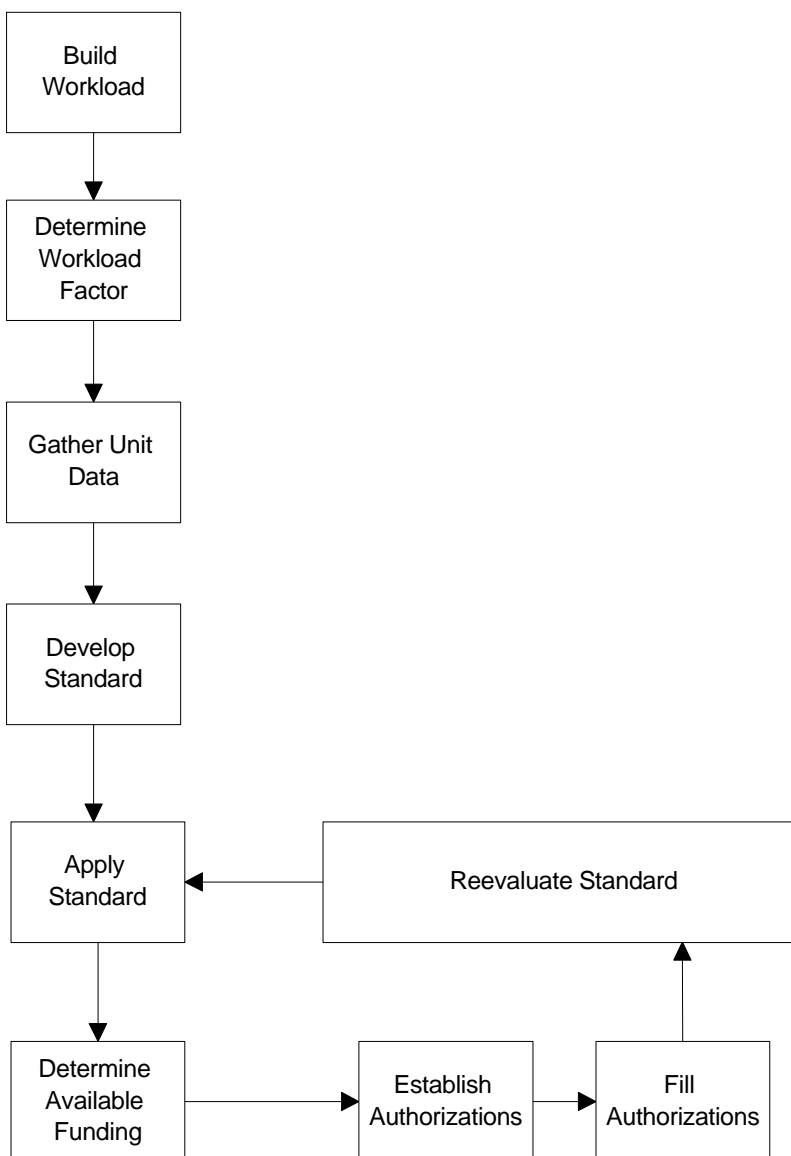
Manpower Management has three basic responsibilities:
(1) manpower requirement development and management,
(2) manpower and personnel document management, and
(3) manpower analysis.

Requirement Development and Management

Managers often make the mistake of confusing manpower and personnel. Manpower deals with the spaces, or positions, required to do the job. Personnel refers to the faces, or the people, filling those positions. The two processes are managed independently, one by the manpower community and other by the personnel community. Unfortunately, just because manpower determines a body is needed, doesn't necessarily mean personnel is going to fill that space.

Figure 3, Manpower Process, shows a number of steps resulting in manpower requirements and, eventually, people.

Figure 4. Manpower Process.



Proof of manpower needs is essential in today's limited resource environment. To determine a function's workload, only three simple questions need to be answered.

1. What work is required?
2. How often is it required?
3. How much time is required to do it?

4.2 Mission

The manpower standards are the basic building blocks for manpower requirements. Working knowledge of these documents will ensure the right number of people and the right types of people doing the right things.

4.3 Personnel Document Management

Several documents are used to record manpower requirements, authorization, and assignments. The AFMS shows manpower requirements. The most important aspect of handling the AFMS is to have the current one.

The Unit Manpower Document (UMD) is a computer-generated document that can be used to produce standard and tailored reports. Other computer-generated documents essential to document management are:

- the Unit Military Manpower Roster (UMPR),
- the Unit Civilian Personnel Roster (UCPR),
- Authorization Change Notices (ACNs),
- the WIMS AUMD, and
- the WIMS Automated Personnel File (APER).

4.4 Manpower Analysis

Once it is known from where manpower comes and the management of personnel and manpower data has been mastered; that data can help the BCE accomplish the mission by doing manpower analysis. In most cases, the manpower analysis seeks to determine capability, what the manpower standards say should be done, and what, actually, can be done. This is accomplished by developing measures, metrics, on what percentage of the work should be accomplished.

The most common measure used is the simple strength metrics; that is, how many people are there, compared to how many there should be. Capability measures deal with how many people there are. In answering the question, how many should there be, both authorized and required should always be considered.

Although capability measures are useful, they show only the right number of people, not the right kinds of people. Skill capability measures help determine if there are the right types of people. To determine skills capability, the strength capability measures are used, by skills, instead of organization levels.

Along with looking at capability and skills, the analyst must also factor experience. An analysis can be done by organization, skill, skill level, or a combination.

This type of analysis is highly important when a unit is facing a cut drill. Another analysis used in a cut drill is impact analysis.

4.5 Summary of Manpower Management

Manpower and personnel are critical to the accomplishment of the CE mission. It is not, however, only the job of the Resources Flight. All squadron managers should be able to understand and operate in the manpower and personnel systems so that they can manage their most important resource — people.

Chapter 5 Information Systems Management

Information Systems (IS) management is an Element in Resources Flight. The major responsibilities of the Element are planning, operation, maintenance, inventory, and training.

The primary part of planning responsibility is to provide managers with an information system that enhances their ability to successfully complete their mission.

Volume 5, Information Systems Management explains the basics of computers before delving into the other responsibilities of Information Systems. This basic understanding is essential in understanding just what the Element does to fulfill its responsibilities. Chapter 2 reviews the basic parts of a computer and looks at types of computer systems.

The remainder of Volume 5 details how the IS manager fulfills the other responsibilities of the position. Under operations, the IS manager makes sure the system is both accessible and secure, maintains software, ensures the integrity of data, and controls communications via computer with the worldwide CE community.

In maintaining the systems, the IS manager ensures service contracts are in place and all hardware and software are covered. The IS managers maintains inventory for both hardware and software, keeping very close track of what needs to be replaced and when. Training is such an important part of the Element, it is included in the planning process. Initial and followup training are both essential.

The coordinated planning effort ensures that the IS will be able to grow with and support the needs of the BCE unit.

A few of the benefits of formal planning follow.

- The unit acquires a system that will integrate with existing and future systems.
- Formal planning prevents the risk funds will be wasted on ill-fated technology or items that are considered neat, versus items that meet a need.
- It helps the IS manager evaluate progress and make needed adjustments.

- It increases internal customer satisfaction by giving them a stake in the plan. That is, including the user in the planning phase can greatly increase the likelihood the fielded resource will actually do what the user wants.

The four steps used in establishing the IS plan are:

Step 1: set objectives,

Step 2: conduct an external analysis,

Step 3: conduct an internal analysis, and

Step 4: identify strategic initiatives.

5.1 Planning

Planning for information systems is not magic, it does not require a crystal ball, or a perfect prediction of the future. It does, however, require a coordinated effort between the IS manager, all CE users, the communication squadron, and the Air Force Civil Engineer Support Agency. The coordinated planning effort ensures that the IS will be able to grow with and support the needs of the CE unit.

The IS plan objectives must match the organizational objectives and provide some clear benchmark to measure any progress. For example, the objective set for system availability might be 99 percent up time.

No information system is stand alone so the external environment must be reviewed and the direction AF/CE plans to take with it's technology known.

The fourth step of the planning process includes a review of internal requirements, as well as, current IS resources. During this internal analysis, the customer's software and hardware requirements are reviewed and capacity planning performed.

Using the internal analysis, strategic initiatives can be determined that will significantly improve IS and IS management.

Some of these initiatives may require significant investment, while others may be relatively easy to acquire or accomplish.

5.2 Operation

Another major responsibility of the IS manager is system operation. The manager is responsible for:

- the organization and accessibility of the system,

- ensuring that the system hardware and data are protected and secure,
- controlling data/system quality and integrity,
- recovering/restoring and upgrading software, and
- controlling communications, connectivity, and data exchange with the worldwide CE community.

The IS manager must configure the operating system to meet users' needs by defining printers, modems access, user restrictions, and arrange the system based on standard naming conventions. All files on the WIMS have a three-tier naming convention. It consists of the volume, library, and file. The IS manager ensures the WANG mainframe's volume names conform to AF Civil Engineer naming conventions.

The Resources Flight is responsible for operation of the computer system and the data integrity; however, all members of the organization are responsible for ensuring the quality of the data and each flight is responsible for the quality of the data being input. The IS manager periodically checks on the data by running reports to retrieve information that should be in the system. If the reports show information that is wrong, the owner of the data must correct these problems.

When hardware and/or software malfunction and a database is damaged, procedures must be in place to restore the database to its original condition. The IS manager is responsible for periodically backing up data to prevent complete loss of data in case of a system crash. The frequency of the backups really depends on the volatility of the data.

5.3 Maintenance

The IS manager is responsible for systems maintenance, ensuring all equipment and software is covered by some form of a maintenance contract. There are alternative contract avenues available. Depending on the situation, the manager may select either a monthly maintenance or the manager may determine that a per-call contract should be established.

In some cases, for core mainframe equipment, a monthly contract that includes parts and labor is established, due to the high cost of parts for the mainframe. For non-core equipment, a per-call contract is established. With the per

call contract, the unit is billed for any replacement parts used; as well as, any labor costs.

5.4 Inventory

The IS manager is responsible for maintaining the system inventory, including software and hardware and for identifying computer equipment that is no longer needed. This equipment will be redistributed across the AF or Department of Defense (DoD). If there are no other parties interested in the equipment, the manager is required to turn the equipment into the Defense Reutilization Materiel Office (DRMO).

5.5 Training

Training is an extremely important responsibility of the Resources Flight. This responsibility is identified in the manpower standard, and credit is given for this activity. To ensure time is allowed for training, it should be included in the planning process. When new systems are acquired, users must be educated on their functions and utility. The IS manager may perform periodic classes on the uses of new hardware or software.

5.6 Management Interfaces

Often the IS manager will train individuals from different flights and then have these students train their flight personnel.

The IS management interfaces with each CE flight, the Communications Squadron, computer maintenance contractor, the SSG, AFCESA, other computer operators, base operational contracting, and internal systems.

5.7 Summary of Information Systems Management

In today's highly technical environment, the CE squadron's information systems have become critical to mission accomplishment. Proper planning, operation, maintenance, and training will ensure the best use of these critical resources.

WILLIAM P. HALLIN, Lt General, USAF
DCS/Installations and Logistics

Attachment 1 Sample Resources Flight Chief Position Description

CD NUMBER:

Page 1

AIR FORCE CORE PERSONNEL DOCUMENT

ORGANIZATION:	CPD NUMBER:	
SUPV LEV CODE: 1	COMP LEV CODE:	
TARGET GRADE:	FLSA:	EXEMPT
JOB SHARE: N	CAREER PROG ID:	
SENSITIVITY: NON-CRITICAL-SENSITIVE	BUS: 8888	
EMERGENCY ESS: N	DRUG TEST: N/A	
KEY POSITION: N	POSITION HIST:	

CLASSIFICATION: Supervisory Resources Manager, GS-0301-12

DUTY TITLE: Civil Engineer Resources Officer

ORG & FUNC CODE: ECY CIVIL ENGINEER

1ST SKILL CODE: 34% AKTSVC RESOURCES MANAGEMENT

2ND SKILL CODE: 33% AXV FINANCIAL ADMINISTRATION

3RD SKILL CODE: 33% ARGREM MGMT ANLST/MNPWR UTILIZATION-CONTROL

CLASSIFIED BY:

CLASSIFIER SIGNATURE

DATE

SUPERVISORS CERTIFICATION:

I certify that this Core Personnel Document is an accurate statement of the major duties, knowledges, skills, and abilities, responsibilities, physical and performance requirements of this position and its organizational relationships. The position is necessary to carry out government functions for which I am responsible. This certification is made with the knowledge that this information is to be used for statutory purposes relating to appointment and payment of public funds and that false or misleading statements may constitute violations of such statutes or their implementing regulations.

SUPERVISOR:

SUPERVISOR SIGNATURE

DATE

CERTIFICATION:

R a t e r / S u p v .				
D a t e				
R e v i e w e r				
D a t e				
E m p l o y e e *				
D a t e				

* Signature acknowledges receipt. It does not indicate agreement/disagreement.

AF Form 1003 APR 90 (COMPUTER GENERATED)

PURPOSE OF POSITION AND ORGANIZATIONAL LOCATION:

The primary purpose of this position is: to provide a manager for the Resources Flight which is responsible for programming and executing fiscal policies and manpower requirements for current resource programs; administer CE automated programs; improve resource utilization and increase productivity; manage and administer real estate functions relating to acquisition, transfer, disposal, accountability and reporting of all real estate assets; to analyze, evaluate and implement proposed changes or modifications necessary to effectively accomplish the mission of the Civil Engineer organization.

The organizational location of this position is: _____ Command, _____ Air Force Base, _____ Support Group, _____ Civil Engineer Squadron, Resources Flight.

ORGANIZATIONAL GOALS OR OBJECTIVES:

The organizational goals or objectives of this position are: to effectively manage the resources (financial, manpower, real property, and computer support) for the Civil Engineer organization. Enhance the quality of service provided to Civil Engineer customers both internal and external.

_____ DUTY 1:

Provides staff support and advice in resource management programs and organizational policies and procedures.
% Critical.

STANDARDS:

- A. Reviews and interprets new and established directives, instructions, regulations, and delegations of authority for potential impact on major program objectives, operating policies and work operations.
- B. Monitors the effect and progress of changes and makes adjustments to assure accomplishment of goals and objectives. Overseeing the execution of programs in the four distinct areas (i.e., management information systems, financial management, real estate and manpower).
- C. Establishes overall plans, goals and objectives for all areas within the flight and conveys to subordinates in a clear and concise manner.
- D. Consolidates and coordinates completed studies and recommendations of subordinate work groups and other supporting activities to prepare instructions, operating policies, procedures and guidelines.
- E. Represents the organization on resource management issues at base working group levels. Briefs senior management on results and prepares appropriate data for management's use.

KSA: 1, 3, 4, 5, 6, 7, 8, 9, 10, 11

DUTY 2: Conducts analysis of workload requirements. % Critical.

STANDARDS:

- A. Initiates timely requests for manpower adjustments based on a thorough analysis of changing conditions. Ensures that manpower requirements are driven by appropriate factors and that the factors are routinely updated to reflect current and/or projected workloads.
- B. Interprets the more complex and controversial management and engineering study findings and persuades operating officials to adopt proposals for substantial changes in methods to improve procedures.

C. Regularly reassesses the validity of established shop/labor rates for timely identification of cost trends, to provide correct and plausible explanation, and to flag key indicators that could adversely impact the organization's reimbursement earning ability.

D. Determines appropriate work unit measurement procedures by calculating the pertinent direct labor factors to ensure a valid assessment of the organizational performance index for realistic workload planning.

E. Periodically reviews the accuracy and reliability of the data base to ensure valid data is available for true assessments to be made.

F. Accurately translates the impact of program, procedural, and conceptual changes on current and projected work force composition and shop/labor rates.

KSA: 2, 3, 5, 6, 7, 8, 9, 10, 11

DUTY 3: Presents briefings. % Critical.

STANDARDS:

A. Presents clear, concise and well-structured oral presentations that address the designated issues on a regular basis (i.e. weekly or monthly, as required).

B. Considers the composition of the audience, knowledge level and desired outcome when composing the material for the briefing.

C. Ensures that the correct format is used to effectively convey meaning and to meet general or specified standards of acceptability for specific audience.

KSA: 1, 3, 4, 6, 8

DUTY 4: Plans, programs and establishes requirements for the Resources Flight relating to the control of resources for facilities, equipment, and/or manpower. Oversees the execution of programs in four distinct program areas (i.e. information management systems, financial management, real estate management, and manpower). % Critical

STANDARDS:

A. Manages the utilization of the LAN (local area network) and WIMS (work information management system), ensuring effective coordination in the development, implementation and operations for the squadron.

B. Ensures effective management (planning, security of software, equipment maintenance) is accomplished in accordance with Air Force and squadron objectives.

C. Responsible for the management of the manpower process within the squadron including the civilian personnel functions in support of the squadron mission.

D. Responsible for management of real estate program. Oversees the management of all real property records and the base disposal program, and effectively manages the space utilization program in accordance with senior management needs and directives.

E. Develops policy for budgeting of Civil Engineer (CE) funds. Assists in development of annual financial plans and approves procedures for expenditures of funds to ensure proper utilization and tracking of funds for various programs.

KSA: 1, 2, 3, 4, 6, 7, 9, 10, 11

DUTY 5: Performs supervisory personnel management responsibilities. % Critical

STANDARDS:

A. Maintains a professional working relationships with all squadron functions and is available on a supportive basis, providing direction and advice to help resolve work issues.

B. Participates with employees in developing performance plans and explains to employees what is expected. Provides proper guidance and direction, gives feedback on strengths and weaknesses, and holds employees responsible for satisfactory completion of work assignments.

C. Appraises employee performance and within established Air Force guidelines and time frames. Uses appropriate rewards and corrective action in performance management.

D. Regularly reviews employee developmental needs and provides assistance and training (formal and on-the-job) to maintain and improve performance. Encourages employee self-development.

E. Provides counseling for subordinates in response to complaints or to alleviate conduct problems. Effects equitable disciplinary actions and manages employee' leave actions in accordance with regulations and established procedures.

F. Interviews and selects subordinates in accordance with proper personnel practices, procedures and policies.

G. Promotes good safety education and health practices in work areas.

KSA: 1, 2, 3, 4, 6, 7, 10, 11

DUTY 6: Evaluates suggestions, oversees special programs, and Quality Air Force Initiatives, squadron audit reports, etc. % Non-Critical.

STANDARDS:

A. Reviews suggestions in a timely manner to discern the acceptability of the proposal and to ascertain any tangible or intangible benefit.

B. Provides a well-reasoned rationale (including validation of claimed dollar savings) to substantiate recommended disposition.

C. Participates in discussions, meetings or serves on panels or committees.

D. Ensures recommendations, reports, etc. are managed in a timely manner and are accurate and complete in compliance with appropriate rules, regulations, instructions and procedures.

E. Manages self-inspection within squadron, thoroughly and realistically. Ensures aggressive follow-up action is taken to correct open items.

KSA: 2, 3, 11

Other significant facts pertaining to this position are:

Incumbent may be required, at the convenience of the government, to perform temporary duty travel by either government or commercial air transportation, and to utilize government furnished quarters at temporary duty stations when available.

RECRUITMENT KNOWLEDGES, SKILLS, AND ABILITIES

1. Ability to communicate effectively both orally and in writing.
 2. Knowledge of quality management concepts, methodology and operating principles.
 3. Ability to gather, assemble and analyze facts, draw conclusions and devise solutions to problems.
 4. Ability to gain cooperation from others through tact, courtesy, and diplomacy.
 5. Knowledge of labor standards, controls and reporting procedures.
 6. Knowledge of organizational workload requirements and procedures.
 7. Knowledge of personnel and manpower standard development and requirements, procedures and practices process.
 8. Ability to analyze data to determine changes and trends.
 9. Knowledge of cost comparison procedures and applicable directives.
 10. Knowledge of a wide range of concepts, principles and practices relating to Civil Engineer financial management, real estate matters and management information systems and skill in applying this knowledge to difficult and complex work assignments.
 11. Ability to understand and further management goals and objectives.
-

Factor 1, Knowledge Required

Level 1-7 1250 Points

Requires a thorough knowledge and understanding of a wide range of concepts, principles and practices relating to financial management, real estate matters, manpower and information management systems, and skill in quality management concepts, methodology and operating principles of the organization. Knowledge of the major issues, program goals and objectives, work processes, and administrative operations of the organization; knowledge and skill in adapting analytical techniques and evaluation criteria to the measurement and improvement of program effectiveness and organizational productivity and in applying analytical and evaluative methods and techniques to issues or studies concerning the efficiency and effectiveness of program operations; interpersonal skills in presenting staffing recommendations and negotiating solutions to disputed recommendations. Knowledge of pertinent laws, regulations, policies and precedents which affect the use of program and related support resources.

Factor 2, Supervisory Controls

Level 2-4 450 Points

Supervises a workforce of financial program analysts and assistants, real estate officers and specialists, information systems management technicians, and clerical personnel. The supervisor and employees develop a mutually acceptable project plan which typically includes identification of the work to be done, the scope of the project and deadlines for its completion. Within the parameters of the approved project plan, the employee is responsible for planning and organizing the study, estimating costs, coordinating with staff and management personnel, and conducting all phases of the project. The employee informs the supervisor of potentially controversial findings, issues, or problems with widespread impact. Completed projects, evaluations, reports, or recommendations are reviewed by the supervisor for compatibility with organizational goals, guidelines, and effectiveness in achieving intended objectives.

Factor 3, Guidelines

Level 3-4 450 Points

Guidelines consist of departmental, major command and local regulations or manuals, policies, and other issuances which cover these processes. The employee must use judgment in selecting, interpreting, or adapting available guidelines to specific issues or subjects studied. Subjects studied may be covered by a wide variety of administrative regulations and procedural guidelines. The employee uses judgment in researching regulations and in determining the relationship between guidelines and organizational efficiency, program effectiveness, or employee productivity.

Factor 4, Complexity

Level 4-5 325 Points

Programs are extremely complex and involve gathering information, identifying and analyzing issues, and developing recommendations to resolve substantive problems of effectiveness and efficiency of work operations in a program or program support setting. Issues, problems or concepts are not always susceptible to direct observations and analysis. Difficulty is encountered in measuring effectiveness and productivity due to variations in the nature of administrative processes. Information about study topic is often conflicting or incomplete, cannot readily be obtained by direct means, or is otherwise difficult to document. Originality is required in refining existing work methods and techniques for application to the analysis of specific issues or resolution of problems.

Factor 5, Scope and Effect

Level 5-4 225 Points

Assesses the productivity, effectiveness, and efficiency of program operations and/or analyzes and resolves problems in the staffing, effectiveness and efficiency of administrative support and staff activities. Establishes criteria to measure and/or predict the attainment of program or organizational goals and objectives. Contributes to the improvement of productivity, effectiveness and efficiency in program operations and/or administrative support activities at different echelons and/or geographical locations within the organization. Work affects the plans, goals, and effectiveness of missions and programs at these various echelons or locations. The work may affect the nature of administrative work done in components of other agencies.

Factor 6, Personal Contacts

Level 6-3 180 Points

Contacts are with employees, managers, and the Commander. The employee will also work the MAJCOM and managers outside the Civil Engineer organization for support agreement coordination and management matters.

Factor 7, Purpose of Contacts

Level 7-c

The purpose of contacts is to influence managers or other officials to accept and implement findings and recommendations on organizational improvement or program effectiveness. May encounter resistance due to such issues as organizational conflict, competing objectives, or resources problems. Ensure the Base Civil Engineer's position is correctly presented and protected.

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AFPAM32-1003V1 1 JANUARY 1999 **Working in the Resources Flight**

Factor 8, Physical Demands Level 8-1 5 Points

The work is primarily sedentary, although some physical effort may be required.

Factor 9, Work Environment Level 9-1 5 Points

Work is typically performed in an adequately lighted and climate controlled office. May require occasional travel.

CLASSIFICATION SUMMARY:

CLASSIFICATION STANDARD(S) USED:

Administrative Grade-Evaluation Guide, August 1990, (TS-98)

FES LEVELS 1-7 2-4 3-4 4-5 5-4 6-3 7-c 8-1 9-1 PTS: 2890

Position File Name:

USAF Academy Free-Flow Format: 04-94

Date: 24 Dec 96

Attachment 2 Glossary of References and Supporting Information

References

AFI 32-9002 *Use of Real Property Facilities*
AFPD 32-90 *Real Property Management*
AFMS 44EO *Manpower Standard Operations Flight Procedural Guide for Civil Engineer Training (March '96)*

Abbreviations and Acronyms

3E5X1	the engineering AFS
A/C	air conditioning
A-76 Action	Process, under OMB Circular A-76, under which core responsibilities are contracted
AAFES	Army and Air Force Exchange Service
A&E	architect and Engineer - most commonly referring to the contract firms
ABO	air base operability
ACES	Automated Civil Engineer System
ADD	agreed delivery data
AF/CE	Air Force/Civil Engineer
AFCESA	Air Force Civil Engineer Support Agency, Tyndall AFB FL
AFFF	Aqueous film forming foam - the fire-fighting agent often used in hanger systems
AFI	Air Force Instruction
AFIT	Air Force Institute of Technology, Wright Patterson AFB OH
AFMAN	Air Force Manuals
AFMS	Air Force Manpower Standard
AFO	Accounting & Finance Office
AFP	Air Force Pamphlets
AFS	Air Force specialty (formally called AFSC - AFS Code)
AKA	also known as
BBE or BEE	Base Bio-Environmental Engineer
BCAS	Base Contracting Acquisition System
BCE	Base Civil Engineer
BCP	Base Comprehensive Plan (replaced by the Base General Plan)
BEAMS	Base Engineer Automated Management System - an older CE database system
BPA	blanket purchase agreement
BTU	British thermal units - a measurement of energy
BUR	built-up roofing system
CA/CRL	custodial account/custody receipt listing
CADD	computer aided design and drafting, a computer-based program that organizes drafting and design functions to produce high-quality facility drawings.
CALT	contracting administrative lead-time
CAS	Condition Assessment Survey, a DoD program to objectively assess and evaluate DoD facilities for developing CAS
CATV	cable television
CBA	cost/benefit analysis

CDR	contract deficiency report, a report of substandard contract performance
CDS	career development center
CE	Civil Engineer
CEC	office symbol for the CE Engineering Flight
CEMAS	Civil Engineer Material Acquisition System
CFA	Commanders' Facility Assessment (replaced by Facility Investment Metric)
CFETP	career field education and training plans
CIAPS	Customer Integrated Automated Procurement System
CMSgt	chief master sergeant
COCESS	Contractor Operated Civil Engineer Supply Store
CSL	CEMAS Stock List Number
CSU	customer service unit
CWM	cost work order materials
CWON	Collection Work Order Number
DC	direct current
DDC	direct digital control
DIFM	due in from maintenance
DIN	do it now
DIRK	direct input reject key
DoD	Department of Defense
DOLI	date of last inventory
DOLT	date of last transaction
DPMIAC	Defense Pest Management Information Analysis Center
DRMO	Defense Reutilization Marketing Office
DSWO	Direct Scheduled Work Order
DVEP	Disease Vector Ecology Bulletins
ECIP	Energy Conservation Investment Program
EDD	estimated delivery date
EEIC	Element Of Expense/Investment Code
EMCS	Energy Management Control System
EMIS	Environmental Management Information System
EOD	end of day
EPS	Engineering Performance Standards
ESPC	Energy Savings Performance Contract
FAD	force activity designator
FAR	federal acquisition regulations
FCA	fund cite authorization
FEDLOG	Federal Logistics Data
FEMP	Federal Energy Management Program
FIM	facility investment metric
FOB	found on base
FSC	Federal Supply Class
FSDC	Fire Safety Deficiency Code
GIS	graphic information system, a linking of database data with CADD drawings
GOCESS	Government Operated Civil Engineer Supply Store
GOQ	general office quarters

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GSA	General Services Administration
HM	hazardous material
HMP	Hazardous Material Pharmacy
HVAC	heating, ventilation, and air conditioning
ICS	Infrastructure condition standard
IDIQ	indefinite delivery/indefinite quantity, a type of contract
IEC	Issue Exception Code
IEU	individual equipment unit
IL	identification list
IMPAC	International Merchant Purchase Authorization Card
IPM	integrated pest management
IWT	industrial water treatment
LP	local purchase
M&R	maintenance and repair
MADJ	Adjective File
MADT	Adjective Type File
MAJCOM	Major Command
MC	minor construction
MCP	see MILCON
MCPAM	man-hour ceiling/priority analysis method to prioritize RWP work items
MCRL	master cross reference list
MDF	material documentation folder
MFH	military family housing
MILCON	Military Construction Program (previously known as MCP)
ML-C	management data listing
MNAD	Noun Additional Description File
MNON	Noun File
MRA&C	maintenance, repair, alteration, and condition
MRL	material requirements list
MRTSUD	Rejected Transaction Suspense Program
MSDS	material safety data sheet
MSYN	Noun Synonym File
MTL	master task list
NAF	non-appropriated funds
NIIN	National Item Identification Number
NIST	not-in-stock ticket
NPI	non pre-priced
NPL	non-price listed
NSN	National Stock Number
O&M	operations and maintenance
ODBC	open database connectivity, a structure enabling communications between data-bases
OPR	office of primary responsibility
OSD	Office of the Secretary of Defense
PCB	polychlorinated biphenyl, a hazardous additive to some oils used as coolants in transformers

PCN	Product Control Number
PD	pier delivery
PDO	Publishing Distribution Office
PFMR	Project Funds Management Record
PHM	potentially hazardous material
PIIN	Purchase Information Identification Number
PM	preventative maintenance
PMD	property movement document
PO	purchase order
POC	point of contact
POF	Purchase Order File
POL	petroleum, oil and lubricants, AF term for organizations and systems that manage any fuel or oil-based materials
PWS	performance work statement
QAE	quality assurance evaluators, QAEs monitor service contracts.
QASP	quality assurance surveillance plan
QUP	quantity unit pack
RAC	risk assessment criteria
RC	responsibility center/cost center
RCCC	Responsibility Cost Center Code
RDD	required delivery date
RFQ	request for quote
RHA	residue holding area
RIEI	Roofing Industry Educational Institute
RIF	reduction in force
RMS	recurring maintenance schedule
RPIE	real property installed equipment, equipment CE physically installs and maintains as part of a facility
RVP	reverse post
RWP	recurring work program
SABER	simplified acquisition of base engineering requirements, IDIQ contract that performs minor construction and repair.
SBSS	Standard Base Supply System
SFM	specialty function manager
SHC	self-help center
SMART	structural maintenance and repair team
SMSgt	senior master sergeant
SOQ	senior officer quarters
SOW	statement of work
SQL	structured query language, a method for communicating between databases
SSAN	Social Security Account Number
TA	Tables of Allowances
TIB	Technical information bulletins
TIN	turn-in
TLQ	temporary lodging quarter
TO	technical order

UGT	upgrade training
UJC	Urgency Justification Code
UND	urgency of need designator
URMT	utility rates management team, an AFCESA team to support base utility engineers
WIMS	Work Information Management System, the current CE database management system
WO	work order
WRRB	Work Request Review Board (also known as WORB, Work Order Review Board)

Terms**1219 visit --**

The periodic facility visit performed by a work center to identify routine work requirements and schedule a follow-on repair visit by the work center crafts. Known as the 1219 visit due to the use of the AF Form 1219, Base Civil Engineer (BCE) Multi-Craft Job Order.

acquired land --

Land obtained from any private or public source other than land withdrawn from the public domain.

acquisition --

Obtain, use, or control real property or an interest in real property by purchase, condemnation, donation, exchange, leasing, revestment, or recapture.

Air Force proponents --

Air Force major command, installation, other component or other agent designated to act on behalf of the Air Force, responsible for initiating or carrying out the proposed real property acquisition.

annexation --

A procedure by which a municipality; such as a city, town, or village, incorporates Air Force land within the corporate limits of the municipality. Procedures vary depending on state law.

as-builts --

Original facility design drawings (or replacement master drawings or the master computer aided design and drafting (CADD) drawing file). Civil Engineer units use these drawings to document all as-built conditions of a facility and modifications as they occur over the years.

Base Civil Engineer --

Senior-ranking base engineer in the Civil Engineer unit.

blanket purchase agreement (BPA) --

A simplified method of filling anticipated repetitive needs for small quantities of supplies. This agreement is designed to reduce administrative cost in making small purchases by eliminating the need for issuing individual purchase documents. The government is obligated only when a call is placed against it.

blue-line drawings --

Copies of the original as-built or design drawings used for daily work.

BPA call --	An action initiated by a Civil Engineer Material Acquisition System (CEMAS) buyer or an authorized individual to order supplies from firms that have been awarded a blanket purchase agreement.
CEMAS store work order --	A special collection work order (usually work order 00011) with shop code, cost center, cost account code, and EEIC agreed upon to be used to collect the cost of material purchased and maintained in the store.
CEMAS monitor --	The chief of Material Acquisition or designated representative who will interface between Base Contracting, Base Supply, and Accounting and Finance.
CEMAS stocked items --	Items identified or approved by the chief of Material Acquisition to be stocked for recurring demands. Approval is based on demand history, funding availability, and storage limitation.
CEMAS stock list (CSL) --	A unique number assigned to individual items listed in the noun dictionary.
certificate of necessity --	A written statement, signed by Deputy Assistant Secretary of the Air Force for Installation (SAF/MII), which certifies it is necessary (for reasons vital to the national security) for the Air Force to exceed the statutory cost limits established in AFI 32-9001 relative to annual rent or alterations, improvements, and repairs to leased buildings.
cession --	Ceding or yielding by a state of its legislative jurisdiction over government-controlled real property to the federal government.
clearance easement --	The right to remove or prevent obstructions rising into the airspace. Examples are easements over areas beyond the ends of an airfield runway (approach or departure clearance zones). Also, easements adjacent to the sides of the runway (transition zones), clearance for approach lighting sites, communication sites, etc. A clearance easement, specifically, does not include the right of aircraft passage over the land, so the landowner may separately recover for loss of value to his or her land due to low and frequent flights of aircraft.
commercial facilities (industrial-type) --	Air Force-owned and -operated facilities housing a function that could be done by private industry, such as motor repair shops, laundries, bakeries, ice cream manufacturing plants. (Exceptions are base exchanges, commissaries, and other non-appropriated fund activities.)

condemnation --

A judicial proceeding started by the government through the Department of Justice for the purpose of exercising its right of eminent domain. Condemnation results in passage of title and land to the government with or without the consent of the landowner, but with just compensation paid to him or her.

consideration --

Compensation or an equivalent (such as money, material, or services) that is given for something acquired or promised. This may be the appraised fair market value of the real property or may include protection of the real property against loss by fire, water, or other causes, or any mutually agreeable arrangement that does not conflict with governing statutory limitations.

core requirements --

Process oriented descriptions which describe the tasks needed to support Maintenance Engineering.

declaration of taking --

A pleading filed with a federal court of law in a real property condemnation proceeding whereby, on filing the pleading, together with deposit of estimated "just compensation" in the court, the real estate interest is vested in the government.

declaration of excess --

A narrative description of real property that is no longer required for foreseeable Air Force missions. The declaration contains an identification of the land, type of governmental real estate interest, facility inventory information, recommended disposal dates, re-use rights, and services, obligations, and outgrants outstanding (see AFI 32-9004).

direct scheduled work order --

Emergency or essential work generally not requiring detailed planning, also known as job orders.

direct digital control --

Any control system (HVAC, alarms, lighting, or otherwise) using entirely solid-state (digital) components.

District Engineer --

One of the several Division Engineers, US Army Corps of Engineers, who supervise the activities of certain District Engineers and are the intervening management level between the Chief of Engineers and District Engineers (e.g., US Army Engineer Division, North Atlantic, CENAD).

easement --	The right to use the land of another for a specified purpose. Usually, the owners of the land continue in possession and may use it as long as such use does not interfere with the purpose for which the easement was granted. An easement may be acquired for a specific term or in perpetuity. An easement differs from a license because: the privilege granted usually cannot be withdrawn during its term and it is considered to be a permanent interest in the property if the term exceeds one year.
emergency work --	Work that must be accomplished immediately.
eminent domain --	The right of the government to take private property for public use upon payment of just compensation.
Energy Conservation Investment Program (ECIP) --	A Military Construction (MILCON)-funded program primarily intended for accomplishing energy conservation retrofits of existing buildings. It includes construction of new, high-efficiency energy systems and modernization of existing systems. ECIP is an OSD centrally-managed program.
Energy Savings Performance Contract (ESPC) --	Contracting with a private sector company for completion of energy audits and installation of energy conservation projects. This provides a method to acquire energy conservation projects with no AF resources and without payment if savings do not result.
Energy Management Control System (EMCS) --	The civil engineer energy control system that historically manages heating, ventilation, and air conditioning (HVAC) systems. It differs from direct digital control in that it includes both solid state systems and the older pneumatic systems.
engineers --	Any engineer in Civil Engineer units to include the Base Civil Engineer, the Maintenance Engineer, program engineers, and project engineers.
environmental assessment --	A document, occurring early in the planning process, for evaluating the potential environmental impact of a proposed action. An assessment covers the same topical areas as an environmental impact statement (EIS), but with less detail. An assessment results in a decision that an EIS is necessary, or that the proposed action will have no significant effect, therefore, a finding of no significant impact (FONSI) can be made (AFI 32-7004).

environmental impact statement --	A detailed full-disclosure report which, pursuant to the National Environmental Policy Act (NEPA) of 1969, (42 U.S.C. 4321-4347), identifies and analyzes the anticipated environmental impact of a proposed Air Force action and discusses how the adverse effects of the proposal will be mitigated. It is prepared in two stages: a draft statement which is filed with the Environmental Protection Agency (EPA) and made available to the public for comment and a final statement which is revised to reflect comments made on the draft EIS (AFI 32-7004).
essential work --	Work that cannot wait for the next 1219 visit.
expanded clear zone easement --	The right to prohibit all uses of land, within 3,000 feet of the runway threshold and extending 1,000 to 1,500 feet on each side of the runway center line extended, that are incompatible with or could impede, aircraft operations. For additional guidance see AFI 32-7003.
facility investment metric (FIM) --	An Air Force facilities requirements identification program to assess facilities based on mission priority; used to develop funding priorities.
Federal Energy Management Program (FEMP) --	An OSD, centrally-managed program for projects less than \$300K. Projects accomplish energy conservation retrofits of existing buildings or new construction plus energy audits, designs and metering programs. It includes construction of new, high-efficiency energy systems and modernization of existing systems.
fee ownership --	Title to real property belonging to a person or the government where full and unconditional ownership exists. Such ownership does not necessarily include mineral rights.
floodplain --	The 100-year floodplain is the lowland area adjoining inland and coastal waters, including flood prone areas of offshore islands that would be inundated by the base flood. The critical actions (or 500-year) floodplain is the area that would be inundated by a 500-year flood. (See AFI 32-7003.)
functional squadron --	Pre-1992 squadron structure, functionally oriented, it collocated like-functions and distribution portions of the missions and objectives to these functional shops.

general purpose space --	Space in buildings and associated land under the assignment authority of the General Services Administration (GSA) which GSA has found to be suitable for use by federal agencies, generally. The following categories of space are excluded: space in any building in a foreign country; space in any building on the grounds of a military or Coast Guard installation; space in airports; and special purpose space, as defined in GSA Federal Property Management Regulations (41 CFR 101, subpart 101-18.104-1).
grantee --	One to whom a grant is made.
grantor --	The person by whom a grant is made; a transferor of property.
GSA reimbursables --	These are special services, beyond the standard levels of service normally provided by GSA, for which the Air Force must reimburse GSA.
GSA rent --	Formerly called "standard level user charge (SLUC)," a rate charged by GSA for assigned space in government-owned or -leased property for which GSA has the assignment responsibility. The user charge approximates commercial charges for comparable space and services.
GSA space --	Space in buildings owned or leased by GSA and assigned to an Air Force or other federal government activity. This space includes land incidental to the use of the space.
hazardous substance --	This term is defined in CERCLA, 42 U.S.C. 9601 (14). For the purposes of this handbook it includes petroleum, petroleum products, oil, and lubricants (POL).
holding area --	A storage area for work order materials awaiting scheduling.
industrial facility --	Any Air Force -owned, -leased, or -controlled real property facility which is used by a contractor for the purpose of fulfilling government research, development, test, evaluation, production, maintenance, or modification contracts or for the storage of production machinery and equipment in support of such activity.
infiltration and inflow (I/I) --	Amount of water that seeps into a sanitary or storm sewer system, increasing the load on the fixed capacity pipes and treatment systems downstream.

ingrants --	Documents such as licenses, leases, permits, temporary easements, foreign base rights agreements, and treaties, under which the Department of the Air Force acquires an interest in, or control of, real property in less than fee ownership.
jurisdiction --	See legislative jurisdiction.
lease --	A conveyance of exclusive possessory interest in real property for a specified term in return for payment of rent or other consideration to the owner.
legislative jurisdiction--	This term, as used in this instruction in connection with a land area, means the power and authority of the federal government to legislate and to exercise executive and judicial powers within the area.
lessee --	One who possesses the right to occupy real property under a lease.
lessor --	One who holds title to, and conveys the right to use and occupy, a property under a lease.
license --	A privilege that can be withdrawn at will, to use or pass over a licensor's real property for a specific purpose (e.g., right-of-entry for survey and exploration, right-of-entry for construction, tree topping). Licenses merely confer a privilege to occupy real property at the sufferance of the owner. Licenses granted to other federal agencies are called permits.
life-cycle cost --	Primary criteria to be used for design (mandated by the Department of Defense); criteria of analyzing the cost over the life span of a component or system to ensure all costs are used (purchase prices, construction costs, maintainability, efficiency, reliability, etc.).
long-range plan --	Multi-year plan for projects to support a specific infrastructure element, originally termed "5-year Plan," many bases and commands have converted to "6-year Plans" to match the two-year programming cycle.
maintainability --	Characteristic of a system describing the ease or frequency of maintenance, highly maintainable systems cost less to maintain.
maintenance engineer --	Chief of Maintenance Engineering.
MicroPaver --	Automated system used to inventory and analyze pavements.
mobilization --	The process by which the Armed Forces or part of them are brought to a state of readiness for war or other national emergency. This includes activating all or part of the Reserve Components as well as assembling and organizing personnel, supplies, and material.

National Capital Region (NCR) --	For purposes of this instruction only, a region encompassing the District of Columbia; Montgomery and Prince George's Counties in Maryland; Arlington and Fairfax, counties in Virginia; and the cities of Alexandria, Fairfax, and Falls Church in Virginia.
nonindustrial facility --	A unit of real property (other than DoD real property), including improvements. Nonindustrial facilities include hotels, motels, resort facilities, educational institutions, hospitals, office buildings, and other real property that can be used for military purposes. These type of facilities are not used or suitable for production or maintenance of materials, munitions, equipment, supplies, goods, and other products for military or civilian use ocean terminals.
non-MRL items --	Items not included in an established material requirements list (MRL). Most Contractor Operated Civil Engineer Supply Store (COCESS) contracts require the item be added to the MRL before the contractor provides the item.
non-pre-priced items (NPI) --	An item obtained for Air Force use by a COCESS contractor for which there was no prior solicited and agreed costs.
noun dictionary --	An item record list which includes item description, pricing history, demand data, and inventory data for each item loaded in CEMAS.
offer of gift (donation) --	Voluntary offer to transfer or convey to the government an interest in real property without payment or consideration of any kind by the government (AFI 51-601).
objective squadron --	Post-1992 squadron structure, objective-oriented, it purposes to collocate all functions necessary to support a mission or objective.
operations specialists --	The Air Force specialty created to support the scheduling and controlling of the Civil Engineer work forces; also known as work force manager, controller, triple-nickel, production controller, and scheduler.
option to purchase --	A contract whereby the owner of the real property gives the government the right to acquire an interest in the property at a stated price during a specified period of time. An offer to sell property, unsupported by any consideration, is not considered an option, and it may be withdrawn at anytime (10 U.S.C. 2677).

outgrants --	Documents such as leases, licenses, easements, joint-use agreements, and other agreements (including use agreements) under which the government's interest in, or control of, real property, as exercised through the Department of the Air Force, is modified by conferring rights therein to another government agency, nonfederal entity (such as a state or local government), or a private party (for such use as grazing livestock). (See AFI 32-9003.)
overhires --	Non-permanent employees hired to fulfill a specific purpose who does not fill an authorized position on the unit manning document, but is paid from civilian pay accounts and counts against the unit work-year ceiling
palace acquires--	Apprentice engineers hired by Air Force Personnel Center and managed on a central manning document; Major Commands and bases commit to a three-year training program and final job placement within the command
permit --	A nonpossessory right of exclusive or nonexclusive use of real property. When granted to a party other than a federal agency, it generally covers a one-time use and is called a "license." However, the term also is used to describe an authorization to use property under the jurisdiction of one government agency by another for a definite period. These two uses of the term must not be confused.
pre-priced items --	These are commonly used items where prices have been previously determined. This is basically what the COCESS contracts have been awarded on. The contractor agrees to provide particular items at a specified price.
pre-priced blanket purchase agreement --	Pre-negotiated BPAs established with vendors that identify specific items to be purchased at specific prices for a specific period of time. These are primarily used to reduce administrative cost and buyer time for purchasing high usage items such as CEMAS store stock.
preventative maintenance --	Recurring work performed to safeguard and/or extend the efficient and effective lifespan of real property, RPIE, or other equipment items.
program engineers --	Engineers of Maintenance Engineering, so termed because they manage infrastructure programs.
project engineers --	Engineers of the Engineering Flight, so termed because they manage projects (design and construction).

project --	As related to real estate acquisition activities, a project is a real property acquisition action, or related actions, at an Air Force installation to fulfill a known requirement. Related real property actions that constitute a complete project are processed simultaneously. (For example: The acquisition of land for an ammunition storage project usually involves the acquisition of fee ownership for the land area used to construct storage facilities and restrictive easements over an adjacent safety area.)
public domain --	Land originally acquired by the United States from foreign governments and which has never left United States ownership. It is administered by the Department of the Interior.
public lands --	Any land and interest in land owned by the United States within the states and administered by the Secretary of the Interior through the Bureau of Land Management without regard as to how the United States acquired ownership. The term excludes lands located on the outer Continental Shelf and lands held for the benefit of Indians, Aleuts, and Eskimos (43 U.S.C. 1702 (e) (see withdrawn land).
purchase request abstract --	CEMAS-generated LP requisition document used to request purchase of BCE items by the buyers.
purchase order --	A document authorizing a vendor to deliver BCE materials.
real property --	Lands, buildings, structures, utilities systems, improvements and appurtenances thereto. Includes equipment attached to and made part of buildings and structures (such as heating systems), but not movable equipment (such as plant equipment).
real estate directive --	A request to another federal agency (e.g., Office of the Chief of Engineers, US Army Corps of Engineers, Department of the Army or Naval Facilities Engineering Command, Department of the Navy or Bureau of Land Management, US Department of the Interior) to act on a real estate matter on behalf of the Air Force.
real estate --	See real property.
recurring work --	Routine, redundant, recurring work involving real property, real property installed equipment (RPIE), or systems and other equipment maintained by CE; scope and frequency is well known, locations are well established, materials are available or not required.

red-line drawings --	Marked-up drawings (typically blue-lines) indicating changes to facilities and as-built conditions, used to update as-built drawings.
release --	See CERCLA, 42 U.S.C. 9601 (22).
reliability --	Characteristic of a system that describes its anticipated lifespan and performance.
rent, nominal --	A rental consideration of a token amount in money or services. Generally, it involves a rental payment of \$1.00 per year. Nominal rental also means a consideration completely unrelated to the actual or fair market value of the leased property.
request and authority to cite funds --	Base Contracting is provided a quarterly dollar target against which Base Civil Engineer local purchase items are obligated. The availability is certified by Accounting and Finance and the target amount is administered by Base Contracting. The Civil Engineer Funds Management Section should provide a complete AF Form 616, Fund Cite Authorization, to Base Contracting no later than the first working day of the quarter.
residue holding account --	An account for maintaining accountability of excess material after completing a work order.
restrictive safety easement --	The right to restrict the erection of habitable buildings, the congregation of people, or other activities within a specified safety clearance distance of munitions storage areas, armed aircraft and explosives-related facilities (see AFI 91-409).
retrocession --	The act of giving back to a state all or part of the federal legislative jurisdiction formerly enjoyed by the government.
right-of-way easement --	The right to pass over the land of another for a specific purpose. Such use could be for constructing a road, installing pipelines, pole lines, or telephone cables, etc.
right of entry --	The temporary right to enter on real property for a specified purpose without acquiring any estate or interest in it.
service contract --	A contract for nonpersonal services, executed under the Armed Services Procurement Act of 1947, where the contracting party agrees to perform some service for the Air Force and the Air Force agrees to pay for such service. In performing the service, the contractor may use real property in which he or she has an interest, even to the extent of permitting the Air Force to go on the property in a nonexclusive manner.
SLUC --	Standard Level Users Charge (see GSA rent).

stay-in-schools --	Temporarily hired employees who work a portion of the work week and attend school the rest of the week; are overhires and do not count against a manning document, pay comes from paid civilian pay and hours count against the unit work-year ceiling
space, special purpose --	Space in buildings not under assignment responsibility of the General Services Administration, including land incidental to the use thereof, that is fully or predominantly used for the special purposes of an agency having custody of such space and generally not suitable for use by other agencies. Examples of such space include computer centers, hospitals, laboratories, mints, penal institutions.
space, general purpose --	Space in buildings under assignment responsibility of the General Services Administration, including land incidental to the use thereof, that the GSA has determined to be suitable for use by federal agencies generally, except: space in buildings on installations of the Department of Defense or the Department of Transportation (US Coast Guard facilities) and any space designated by the GSA as special purpose space in 41 CFR 101, subchapter D, subpart 101-18.104-1.
stock record account number (SRAN) --	An accountable stock record account established for the Civil Engineer Material Acquisition Systems (CEMAS).
storage --	The holding of hazardous substances for a temporary period prior to the hazardous substances being either used, treated, transported, or disposed.
subordination agreement --	An agreement whereby the owner of a real estate interest (including subsurface oil, gas and mineral rights) agrees to suspend or limit the exercise of all or part of his or her ownership rights under specified terms and conditions (usually to avoid interference with governmental use of the surface or operations).
suspension agreement --	Suspension by lease of an individual's grazing or mineral rights in public land or state-owned lands.
urban centers --	These are the cities and standard metropolitan statistical areas (SMSA). General Services Administration is the sole leasing authority for obtaining general purpose space in these areas.

value (current, fair, and estimated) --	As used in this regulation, these terms mean current fair market value or current fair market rental value, as appropriate. Fair market value is the amount in cash, or on terms reasonably equivalent to cash, for which the property would be sold by an owner, willing but not obliged to sell, to a purchaser who desires, but is not obliged, to buy. Fair market rental value of a property is the amount that, in a competitive market, a well-informed and willing lessee would pay and that a well-informed lessor would accept for the use and occupancy of the property for a particular term.
vault --	Storage location of base as-built and Base Comprehensive Plan drawings, so termed because many bases originally stored these drawings in a vault for physical security.
wetlands --	Areas that are inundated by surface or ground water with a frequency sufficient to support, and under normal circumstances do or would support, a prevalence of vegetative or aquatic life that requires saturated or seasonally-saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs and similar areas such as mud flats, natural ponds, potholes, river overflows, sloughs, and wet meadows. Wetlands may be, but are not necessarily, located in floodplains (AFI 32-7005).
withdrawn land --	Public land that has been set aside or designated for a specific public purpose, such as a national park, wildlife refuge, or national defense use. Withdrawal of public lands generally has the effect of segregating such land from lease, sale, settlement, or other dispositions under the public land laws.
work center(s) --	Civil Engineering Operations maintenance teams organized to maintain and repair the bases facilities and infrastructure systems. Depending on the installation, these Centers can be classified as either shops, zones or a combination of both.
work orders --	Work requiring detailed planning or capitalization of the real property records.

Attachment 3 Core Requirements — All Flight Elements
(AFMS 44EO Attachment 1, Appendix C, 9 May 1997)

PROCESS ORIENTED DESCRIPTION
MAINTENANCE ENGINEERING

A1C.1. RECEIVES TRAINING:

A1C.1.1. RECEIVES CONTINGENCY TRAINING:

A1C.1.1.1. RECEIVES CATEGORY 1, CLASSROOM TRAINING.

A1C.1.1.2. RECEIVES CATEGORY 2, HANDS-ON TRAINING.

A1C.2. MANAGES REAL PROPERTY MAINTENANCE:

A1C.2.1. MANAGES INFRASTRUCTURE MAINTENANCE AND REPAIR PROGRAM:

A1C.2.1.1. MANAGES PAVEMENTS PROGRAM.

A1C.2.1.2. MANAGES ROOFING PROGRAM.

A1C.2.1.3. MANAGES WATER AND WASTEWATER PROGRAM.

A1C.2.1.4. MANAGES INDUSTRIAL WATER TREATMENT PROGRAM.

A1C.2.1.5. MANAGES ELECTRICAL DISTRIBUTION PROGRAM.

A1C.2.1.6. MANAGES AIRFIELD LIGHTING PROGRAM.

A1C.2.1.7. MANAGES CORROSION CONTROL PROGRAM.

A1C.2.1.8. MANAGES TRAFFIC PROGRAM.

A1C.2.1.9. MANAGES ENERGY PROGRAM.

A1C.2.1.10. MANAGES SHELTER PROGRAM.

A1C.2.1.11. MANAGES HVAC PROGRAM.

A1C.2.1.12. MANAGES WARRANTY PROGRAM.

A1C.2.2. REVIEWS DESIGN PROJECT:

A1C.2.2.1. REVIEWS IN-HOUSE DESIGNED PROJECT.

A1C.2.2.2. REVIEWS ARCHITECTURAL-ENGINEERING DESIGNED PROJECT.

A1C.2.2.3. REVIEWS MILITARY CONSTRUCTION DESIGNED PROJECT.

A1C.2.3. PERFORMS WORK ANALYSIS:

A1C.2.3.1. DEVELOPS PERFORMANCE STANDARD.

A1C.2.3.2. DEVELOPS AND MEASURES PRODUCTIVITY INDICATOR.

A1C.2.3.3. REVIEWS WORK CENTER WORKLOAD, MANPOWER BALANCE, AND SKILLS MIX.

A1C.2.3.4. PERFORMS ECONOMIC ANALYSIS.

A1C.2.3.5. PERFORMS OPERATIONS STAFF WORK.

A1C.2.4. MANAGES CONTRACT:

A1C.2.4.1. MANAGES RECURRING SERVICE CONTRACT:

A1C.2.4.1.1. DEVELOPS AND MODIFIES CONTRACT PACKAGE.

A1C.2.4.1.2. NEGOTIATES CONTRACT.

A1C.2.4.1.3. INSPECTS CONTRACT.

A1C.2.4.1.4. PREPARES REPORT.

A1C.2.4.2. MANAGES NON-RECURRING SERVICE CONTRACT:

A1C.2.4.2.1. DEVELOPS AND MODIFIES CONTRACT PACKAGE.

A1C.2.4.2.2. NEGOTIATES CONTRACT.

A1C.2.4.2.3. INSPECTS CONTRACT.
A1C.2.4.2.4. PREPARES REPORT.
A1C.2.4.3. MANAGES UTILITY CONTRACT:
A1C.2.4.3.1. DEVELOPS AND MODIFIES CONTRACT PACKAGE.
A1C.2.4.3.2. NEGOTIATES CONTRACT AND MODIFIED PACKAGE.
A1C.2.4.3.3. MAINTAINS BROCHURE.
A1C.2.4.3.4. MANAGES UTILITY RESALE AGREEMENT.
A1C.2.4.3.5. CONDUCTS BASE UTILITY SERVICE MEETING.
A1C.2.5. PROVIDES NON-DESIGN DRAFTING SUPPORT:
A1C.2.5.1. UPDATES AS-BUILT DRAWING.
A1C.2.5.2. MAINTAINS TABS FOR BASE COMPREHENSIVE PLAN (BCP).
A1C.2.5.3. PERFORMS NON-DESIGN REPRODUCTION.
A1C.2.5.4. REPAIRS AND MAINTAINS DRAWING.

PROCESS ORIENTED DESCRIPTION

FACILITY MAINTENANCE

A1D.1. RECEIVES TRAINING:

A1D.1.1. RECEIVES CONTINGENCY TRAINING:
A1D.1.1.1. RECEIVES CATEGORY 1, CLASSROOM TRAINING.
A1D.1.1.2. RECEIVES CATEGORY 2, HANDS-ON TRAINING.
A1D.1.2. RECEIVES CERTIFICATION TRAINING.

A1D.2. PROVIDES LOGISTIC SUPPORT:

A1D.2.1. PROVIDES CUSTOMER SUPPORT:
A1D.2.1.1. RECEIVES AND PROCESSES WORK REQUEST.
A1D.2.1.2. PROVIDES JOB STATUS.
A1D.2.1.3. TRAINS FACILITY MANAGER.
A1D.2.2. OPERATES FORWARD SUPPLY STORE.

A1D.3. PERFORMS SYSTEM OPERATION: Performs unmanned heat plant surveillance.

A1D.4. PERFORMS REAL PROPERTY MAINTENANCE: Performs scheduled maintenance (maintains HVAC system, electrical system, plumbing system, and structural system).

A1D.5. PERFORMS REAL PROPERTY REPAIR:

A1D.5.1. PERFORMS EMERGENCY REPAIR:
A1D.5.1.1. REPAIRS HVAC SYSTEM.
A1D.5.1.2. REPAIRS ELECTRICAL SYSTEM.
A1D.5.1.3. REPAIRS PLUMBING SYSTEM.
A1D.5.1.4. REPAIRS STRUCTURAL SYSTEM.
A1D.5.1.5. PERFORMS EMERGENCY ASBESTOS REMOVAL AND CONTAINMENT.
A1D.5.2. PERFORMS ROUTINE REPAIR:
A1D.5.2.1. REPAIRS HVAC SYSTEM.
A1D.5.2.2. REPAIRS ELECTRICAL SYSTEM.
A1D.5.2.3. REPAIRS PLUMBING SYSTEM.

A1D.5.2.4. REPAIRS STRUCTURAL SYSTEM.

A1D.6. PERFORMS REAL PROPERTY MODIFICATION AND ALTERATION:

A1D.6.1. ACCOMPLISHES MINOR PROJECT.

A1D.6.2. SUPPORTS SELF-HELP PROJECT.

PROCESS ORIENTED DESCRIPTION

MATERIAL ACQUISITION

A1B.1. RECEIVES TRAINING:

A1B.1.1. RECEIVES CONTINGENCY TRAINING:

A1B.1.1.1. RECEIVES CATEGORY 1, CLASSROOM TRAINING.

A1B.1.1.2. RECEIVES CATEGORY 2, HANDS-ON TRAINING.

A1B.1.2. RECEIVES CERTIFICATION TRAINING:

A1B.1.2.1. RECEIVES TRAINING ON HAZARDOUS MATERIAL HANDLING (CAT 1).

A1B.1.2.2. RECEIVES TRAINING ON SUPPLY (CAT 1).

A1B.2. PERFORMS LOGISTIC SUPPORT:

A1B.2.1. PERFORMS MATERIAL ACQUISITION:

A1B.2.1.1. PROCESSES REQUISITION.

A1B.2.1.2. RECEIVES MATERIAL.

A1B.2.1.3. MANAGES HOLDING AREA.

A1B.2.1.4. MANAGES GOVERNMENT-OPERATED CIVIL ENGINEERING SUPPLY STORE (GOCESS).

A1B.2.1.5. MANAGES RESIDUAL STORAGE.

A1B.2.1.6. PICKS UP PROPERTY FROM VENDOR.

A1B.2.1.7. TRACKS MATERIAL.

A1B.2.1.8. CLOSES OUT WORK ORDER.

A1B.2.1.9. MANAGES HAZARDOUS MATERIAL PROGRAM.

A1B.2.1.10. MAINTAINS CIVIL ENGINEERING MATERIAL ACQUISITION SYSTEM (CEMAS) DATA BASE.

A1B.2.1.11. ACCOMPLISHES POST-POST TRANSACTION.

A1B.2.1.12. MANAGES DUE-IN-FOR MAINTENANCE (DIFM) ITEMS.

A1B.2.1.13. MONITORS WORK CENTER STOCK.

A1B.2.1.14. COORDINATES ADJUSTED LEVELS.

A1B.2.1.15. PROVIDES CUSTOMER TRAINING.

A1B.2.1.16. ACCOMPLISHES END-OF-YEAR CLOSEOUT.

A1B.2.1.17. ASSISTS COST CENTER EQUIPMENT CUSTODIANS.

A1B.2.1.18. MANAGES BASE SERVICE STORE AUTHORIZED USER LIST.

A1B.2.2. MANAGES VEHICLE FLEET:

A1B.2.2.1. SUBMITS VEHICLE REQUEST.

A1B.2.2.2. MAKES VEHICLE ASSIGNMENT.

A1B.2.2.3. COORDINATES CREDIT CARD.

A1B.2.2.4. COORDINATES AND PICKS UP NEW OR REPLACEMENT GSA VEHICLE.

A1B.2.2.5. MONITORS VEHICLE STATUS.

A1B.2.2.6. REPORTS AND INVESTIGATES INCIDENT.

- A1B.2.2.7. ATTENDS VEHICLE MEETINGS.
- A1B.2.2.8. MONITORS VEHICLE TRAINING PROGRAM.
- A1B.2.3. PERFORMS APPLIANCE MANAGEMENT:
 - A1B.2.3.1. ORDERS AND TURNS-IN APPLIANCE.
 - A1B.2.3.2. RECEIPTS FOR AND STORES APPLIANCE.
 - A1B.2.3.3. MAKES APPLIANCE EXCHANGE.
 - A1B.2.3.4. MAINTAINS BACKUP STOCK.
 - A1B.2.3.5. MANAGES WARRANTY PROGRAM.
- A1B.2.4. MANAGES SELF-HELP STORE.

PROCESS ORIENTED DESCRIPTION INFRASTRUCTURE SUPPORT

A1E.1. RECEIVES TRAINING:

- A1E.1.1. RECEIVES CONTINGENCY TRAINING:
 - A1E.1.1.1. RECEIVES CATEGORY 1, CLASSROOM TRAINING.
 - A1E.1.1.2. RECEIVES CATEGORY 2, HANDS-ON TRAINING.
- A1E.1.2. RECEIVES CERTIFICATION TRAINING.

A1E.2. PROVIDES LOGISTIC SUPPORT:

- A1E.2.1. DETERMINES REQUIREMENT AND REQUESTS MATERIAL.
- A1E.2.2. MAINTAINS WORK CENTER STOCK.
- A1E.2.3. MANAGES WORK CENTER EQUIPMENT.

A1E.3. PERFORMS SYSTEM OPERATION:

- A1E.3.1. OPERATES AIRCRAFT ARRESTING SYSTEM:
 - A1E.3.1.1. PERFORMS MA-1A POST-ENGAGEMENT OPERATION.
 - A1E.3.1.2. PERFORMS MA-1A ACTIVATION OR DEACTIVATION.
 - A1E.3.1.3. PERFORMS BAK-12 POST-ENGAGEMENT OPERATION.
 - A1E.3.1.4. PERFORMS BAK-12 ACTIVATION OR DEACTIVATION.
 - A1E.3.1.5. PROVIDES OPERATOR TRAINING.
- A1E.3.2. OPERATES DIESEL OR GAS GENERATOR:
 - A1E.3.2.1. OPERATES EMERGENCY GENERATOR.
 - A1E.3.2.2. TRAINS BASE PERSONNEL ON GENERATOR.
 - A1E.3.2.3. REFUELS EMERGENCY GENERATOR.
- A1E.3.3. OPERATES WATER DISTRIBUTION SYSTEM:
 - A1E.3.3.1. TAKES SAMPLE AND TESTS WATER.
 - A1E.3.3.2. PERFORMS CHEMICAL TREATMENT ON WATER SUPPLY.
 - A1E.3.3.3. OPERATES FIRE HYDRANT.
- A1E.3.4. OPERATES WASTEWATER COLLECTION SYSTEM:
 - A1E.3.4.1. OPERATES OIL SEPARATOR VALVE.
 - A1E.3.4.2. PRETREATS WASTEWATER.

A1E.4. PERFORMS REAL PROPERTY MAINTENANCE:

- A1E.4.1. PERFORMS MAINTENANCE ON EXTERIOR ELECTRICAL SYSTEM:
 - A1E.4.1.1. MAINTAINS OVERHEAD DISTRIBUTION SYSTEM.

A1E.4.1.2. MAINTAINS UNDERGROUND DISTRIBUTION SYSTEM.
A1E.4.1.3. MAINTAINS SUBSTATION.
A1E.4.1.4. MAINTAINS SWITCHING STATION.
A1E.4.1.5. MAINTAINS ELECTRICAL VAULT.
A1E.4.1.6. MAINTAINS CRITICAL EXTERIOR LIGHT.
A1E.4.1.7. MAINTAINS NON-CRITICAL EXTERIOR LIGHT.
A1E.4.1.8. MAINTAINS TRAFFIC LIGHT.
A1E.4.1.9. MAINTAINS ROTATING BEACON.
A1E.4.1.10. MAINTAINS OTHER EXTERNAL ELECTRICAL SYSTEMS.
A1E.4.2. PERFORMS MAINTENANCE ON AIRFIELD LIGHTING SYSTEM.
A1E.4.3. PERFORMS MAINTENANCE ON AIRCRAFT ARRESTING SYSTEM:
A1E.4.3.1. MAINTAINS MA-1A.
A1E.4.3.2. MAINTAINS BAK-12.
A1E.4.4. MAINTAINS GENERATOR:
A1E.4.4.1. MAINTAINS DIESEL GENERATOR.
A1E.4.4.2. MAINTAINS GAS GENERATOR.
A1E.4.4.3. MAINTAINS AUTOMATIC TRANSFER PANEL.
A1E.4.5. PERFORMS MAINTENANCE ON LIQUID FUEL SYSTEM:
A1E.4.5.1. MAINTAINS TANK.
A1E.4.5.2. MAINTAINS VALVE.
A1E.4.5.3. MAINTAINS PUMP.
A1E.4.5.4. MAINTAINS PIPELINE.
A1E.4.5.5. MAINTAINS OTHER COMPONENT.
A1E.4.6. PERFORMS MAINTENANCE ON GROUNDING AND LIGHTNING PROTECTION SYSTEM.
A1E.4.7. PERFORMS MAINTENANCE ON ALARM SYSTEM:
A1E.4.7.1. MAINTAINS FIRE ALARM AND DETECTION SYSTEM.
A1E.4.7.2. MAINTAINS INTRUSION ALARM SYSTEM.
A1E.4.7.3. MAINTAINS ENVIRONMENTAL ALARM SYSTEM.
A1E.4.8. PERFORMS MAINTENANCE ON SEWAGE SYSTEM:
A1E.4.8.1. CHECKS LIFT STATION AND MAIN CONNECTION.
A1E.4.8.2. LUBRICATES EQUIPMENT IN LIFT STATION.
A1E.4.9. PERFORMS MAINTENANCE ON WATER DISTRIBUTION SYSTEM:
A1E.4.9.1. PERFORMS RECURRING WORK PROGRAM (RWP) FOR PUMP STATION.
A1E.4.9.2. PERFORMS RWP FOR WATER TREATMENT EQUIPMENT.
A1E.4.9.3. PERFORMS RWP FOR WATER STORAGE.
A1E.4.9.4. PERFORMS RWP FOR SWIMMING POOL.
A1E.4.10. PERFORMS MAINTENANCE ON DELUGE SYSTEM:
A1E.4.10.1. CHECKS AND STARTS ENGINE.
A1E.4.10.2. CHANGES OIL AND LUBRICATES.
A1E.4.11. PERFORMS MAINTENANCE ON CATHODIC PROTECTION SYSTEM.
A1E.4.12. MAINTAINS FUEL GAS DISTRIBUTION SYSTEM:
A1E.4.12.1. PERFORMS RWP FOR NATURAL GAS SYSTEM.
A1E.4.12.2. PERFORMS RWP ON LIQUID PETROLEUM SYSTEM.

A1E.5. PERFORMS REAL PROPERTY REPAIR:

A1E.5.1. REPAIRS EXTERIOR ELECTRICAL SYSTEM:

A1E.5.1.1. REPAIRS OVERHEAD DISTRIBUTION SYSTEM.

A1E.5.1.2. REPAIRS UNDERGROUND DISTRIBUTION SYSTEM.

A1E.5.1.3. REPAIRS SUBSTATION.

A1E.5.1.4. REPAIRS SWITCHING STATION.

A1E.5.1.5. REPAIRS ELECTRICAL VAULT.

A1E.5.1.6. REPAIRS CRITICAL EXTERIOR LIGHT.

A1E.5.1.7. REPAIRS NON-CRITICAL EXTERIOR LIGHT.

A1E.5.1.8. REPAIRS TRAFFIC LIGHT.

A1E.5.1.9. REPAIRS ROTATING BEACON.

A1E.5.2. REPAIRS AIRFIELD LIGHTING SYSTEM.

A1E.5.3. REPAIRS AIRCRAFT ARRESTING SYSTEM:

A1E.5.3.1. REPAIRS MA-1A.

A1E.5.3.2. REPAIRS BAK-12.

A1E.5.4. REPAIRS GENERATOR:

A1E.5.4.1. REPAIRS DIESEL GENERATOR.

A1E.5.4.2. REPAIRS GAS GENERATOR.

A1E.5.4.3. REPAIRS AUTOMATIC TRANSFER PANEL.

A1E.5.5. REPAIRS FUEL GAS DISTRIBUTION SYSTEM:

A1E.5.5.1. REPAIRS NATURAL GAS SYSTEM.

A1E.5.5.2. REPAIRS LP GAS SYSTEM.

A1E.5.6. REPAIRS LIQUID FUEL SYSTEM:

A1E.5.6.1. REPAIRS TANK.

A1E.5.6.2. REPAIRS VALVE.

A1E.5.6.3. REPAIRS PUMP.

A1E.5.6.4. REPAIRS PIPELINE.

A1E.5.6.5. REPAIRS OTHER COMPONENT.

A1E.5.7. REPAIRS ALARM SYSTEM:

A1E.5.7.1. REPAIRS FIRE ALARM AND DETECTION SYSTEM.

A1E.5.7.2. REPAIRS INTRUSION ALARM SYSTEM.

A1E.5.7.3. REPAIRS ENVIRONMENTAL ALARM SYSTEM.

A1E.5.8. REPAIRS SEWAGE COLLECTION SYSTEM:

A1E.5.8.1. REPAIRS LIFT STATION.

A1E.5.8.2. REPAIRS SEWAGE LINE.

A1E.5.8.3. REPAIRS OIL SEPARATOR.

A1E.5.8.4. REPAIRS PRETREATMENT EQUIPMENT.

A1E.5.9. REPAIRS WATER DISTRIBUTION SYSTEM:

A1E.5.9.1. REPAIRS PUMP STATION.

A1E.5.9.2. REPAIRS WATER TREATMENT EQUIPMENT.

A1E.5.9.3. REPAIRS WATER STORAGE.

A1E.5.9.4. REPAIRS INSTALLATION WATER LINE.

A1E.5.9.5. REPAIRS WATER VALVES.

A1E.5.9.6. REPAIRS SWIMMING POOL.

A1E.5.9.7. PERFORMS LIMITED ASBESTOS REMOVAL AND CONTAINMENT WORK.

A1E.6. PERFORMS REAL PROPERTY MODIFICATION:

A1E.6.1. MODIFIES ALARM SYSTEM:
A1E.6.1.1. MODIFIES FIRE ALARM AND DETECTION SYSTEM.
A1E.6.1.2. MODIFIES INTRUSION ALARM SYSTEM.
A1E.6.1.3. MODIFIES ENVIRONMENTAL ALARM SYSTEM.
A1E.6.2. MODIFIES EXTERIOR ELECTRICAL SYSTEM:
A1E.6.2.1. MODIFIES OVERHEAD DISTRIBUTION SYSTEM.
A1E.6.2.2. MODIFIES UNDERGROUND DISTRIBUTION SYSTEM.
A1E.6.2.3. MODIFIES SUBSTATION.
A1E.6.2.4. MODIFIES SWITCHING STATION.
A1E.6.2.5. MODIFIES ELECTRICAL VAULT.
A1E.6.2.6. MODIFIES EXTERIOR AREA LIGHT.
A1E.6.2.7. MODIFIES TRAFFIC LIGHT.
A1E.6.2.8. MODIFIES ROTATING BEACON.
A1E.6.3. MODIFIES GENERATOR:
A1E.6.3.1. MODIFIES DIESEL GENERATOR.
A1E.6.3.2. MODIFIES GAS GENERATOR.
A1E.6.3.3. MODIFIES AUTOMATIC TRANSFER PANEL.
A1E.6.4. MODIFIES SEWAGE COLLECTION SYSTEM.
A1E.6.5. MODIFIES WATER DISTRIBUTION SYSTEM.
A1E.6.6. MODIFIES LIQUID FUELS SYSTEM:
A1E.6.6.1. MODIFIES TANK.
A1E.6.6.2. MODIFIES VALVE.
A1E.6.6.3. MODIFIES PUMP.
A1E.6.6.4. MODIFIES PIPELINE.
A1E.6.6.5. MODIFIES OTHER COMPONENT.
A1E.6.7. MODIFIES GROUNDING AND LIGHTNING PROTECTION SYSTEM.
A1E.6.8. MODIFIES CATHODIC PROTECTION SYSTEM.
A1E.6.9. MODIFIES/INSTALLS GAS FUEL DISTRIBUTION SYSTEM:
A1E.6.9.1. MODIFIES/INSTALLS NATURAL GAS DISTRIBUTION SYSTEM.
A1E.6.9.2. MODIFIES/INSTALLS LP SYSTEM.

PROCESS ORIENTED DESCRIPTION

HEAVY REPAIR

A1F.1. RECEIVES TRAINING:
A1F.1.1. RECEIVES CATEGORY 1, CLASSROOM TRAINING.
A1F.1.2. RECEIVES CATEGORY 2, HANDS-ON TRAINING.

A1F.2. PROVIDES LOGISTIC SUPPORT:
A1F.2.1. MANAGES PEST CONTROL INVENTORY.
A1F.2.2. MANAGES HAZARDOUS MATERIAL.
A1F.2.3. MANAGES BASE RECOVERY MATERIAL.

A1F.3. PERFORMS SYSTEM OPERATION:
A1F.3.1. SWEEPS AIRFIELD.
A1F.3.2. SWEEPS STREET.

A1F.3.3. SWEEPS PARKING LOT.

A1F.3.4. SWEEPS OPEN STORAGE AREA.

A1F.4. PERFORMS REAL PROPERTY MAINTENANCE:

A1F.4.1. MAINTAINS AIRFIELD:

A1F.4.1.1. INSPECTS AIRFIELD.

A1F.4.1.2. MAINTAINS AIRFIELD PAVEMENT.

A1F.4.1.3. PERFORMS FLIGHTLINE GROUNDS PEST CONTROL.

A1F.4.1.4. MAINTAINS FLIGHTLINE DITCH AND CULVERT.

A1F.4.2. OPERATES EQUIPMENT TO SUPPORT BASE ACTIVITY.

A1F.4.3. PERFORMS OPERATOR MAINTENANCE ON EQUIPMENT OR VEHICLES.

A1F.4.4. MAINTAINS ROAD:

A1F.4.4.1. MAINTAINS ROAD SURFACE.

A1F.4.4.2. MAINTAINS GUARD RAIL.

A1F.4.4.3. INSPECTS ROAD, CURB, GUTTER, DITCH, AND CULVERT FOR SHORT-TERM MAINTENANCE.

A1F.4.4.4. MAINTAINS CURB AND GUTTER.

A1F.4.4.5. MAINTAINS DITCH AND CULVERT.

A1F.4.4.6. MAINTAINS POST-MOUNTED TRAFFIC DEVICE.

A1F.4.5. PERFORMS PEST MANAGEMENT:

A1F.4.5.1. PERFORMS STRUCTURAL PEST CONTROL.

A1F.4.5.2. INSPECTS FOR PEST AND HERBICIDE CONTROL.

A1F.4.5.3. PERFORMS NON-STRUCTURAL PEST CONTROL.

A1F.4.5.4. PERFORMS OTHER BASE GROUNDS PEST CONTROL.

A1F.4.5.5. PERFORMS MILITARY FAMILY HOUSING (MFH) PEST CONTROL.

A1F.4.6. PROVIDES LOCKSMITH SERVICES:

A1F.4.6.1. PERFORMS LOCKSMITH SERVICE.

A1F.4.6.2. MAINTAINS REAL PROPERTY INSTALLED VAULT AND SAFE.

A1F.4.7. MAINTAINS STORM DRAINAGE:

A1F.4.7.1. CLEANS STORM DRAIN.

A1F.4.7.2. INSPECTS STORM DRAIN FOR SHORT-TERM MAINTENANCE.

A1F.4.8. MAINTAINS DRIVEWAY, PARKING LOT, STORAGE AREA:

A1F.4.8.1. INSPECTS FOR SHORT-TERM MAINTENANCE.

A1F.4.8.2. PERFORMS MAINTENANCE ON DRIVEWAY, PARKING LOT, AND STORAGE AREA.

A1F.4.9. MAINTAINS SIDEWALK, BIKE AND JOGGING SURFACE:

A1F.4.9.1. INSPECTS FOR MAINTENANCE REQUIREMENT.

A1F.4.9.2. PERFORMS MAINTENANCE ON SIDEWALK, BIKE, AND JOGGING SURFACE.

A1F.5. PERFORMS REAL PROPERTY REPAIR:

A1F.5.1. REPAIRS AIRFIELD.

A1F.5.2. REPAIRS INTERIOR FACILITY:

A1F.5.2.1. REPAIRS FIRE PROTECTION SYSTEM.

A1F.5.2.2. REPAIRS LOW VOLTAGE ELECTRICAL SYSTEM.

A1F.5.2.3. REPAIRS GAS DISTRIBUTION SYSTEM.

A1F.5.2.4. REPAIRS CONCRETE FACILITY.
A1F.5.2.5. REPAIRS MASONRY FACILITY.
A1F.5.2.6. REPAIRS INTERIOR WATER DISTRIBUTION SYSTEM.
A1F.5.2.7. REPAIRS PLUMBING FIXTURE.
A1F.5.2.8. REPAIRS HVAC SYSTEM.
A1F.5.2.9. PERFORMS STRUCTURAL REPAIR.
A1F.5.2.10. REPAIRS STUCCO OR PLASTER FACILITY.
A1F.5.2.11. REPAIRS CERAMIC OR QUARRY TILE.
A1F.5.2.12. PERFORMS METAL WORK.
A1F.5.2.13. REPAIRS INTERIOR DRAIN, VENT, AND COLLECTION SYSTEM.
A1F.5.2.14. REPAIRS FLOOR COVERING.
A1F.5.2.15. PERFORMS MINOR PAINTING.
A1F.5.3. REPAIRS BUILDING UTILITY SYSTEM:
A1F.5.3.1. REPAIRS FIRE PROTECTION SYSTEM.
A1F.5.3.2. REPAIRS LOW VOLTAGE ELECTRICAL SYSTEM.
A1F.5.3.3. REPAIRS GAS DISTRIBUTION SYSTEM.
A1F.5.3.4. REPAIRS HVAC SYSTEM.
A1F.5.3.5. REPAIRS MEDICAL PIPING SYSTEM.
A1F.5.3.6. REPAIRS ELECTRICAL APPLIANCE OR EQUIPMENT.
A1F.5.3.7. PERFORMS METAL WORK.
A1F.5.3.8. REPAIRS COMPRESSED AIR DISTRIBUTION SYSTEM.
A1F.5.4. OPERATES EQUIPMENT TO SUPPORT BASE ACTIVITY.
A1F.5.5. REPAIRS ROAD:
A1F.5.5.1. REPAIRS ROAD SURFACE.
A1F.5.5.2. REPAIRS CURB AND GUTTER.
A1F.5.5.3. REPAIRS DITCH AND CULVERT.
A1F.5.6. REPAIRS EXTERIOR FACILITY:
A1F.5.6.1. REPAIRS PLUMBING FIXTURE.
A1F.5.6.2. REPAIRS LOW VOLTAGE ELECTRICAL SYSTEM.
A1F.5.6.3. REPAIRS CROSS-CONNECTION CONTROL AND BACKFLOW.
A1F.5.6.4. PERFORMS STRUCTURAL REPAIR.
A1F.5.6.5. REPAIRS CONCRETE FACILITY.
A1F.5.6.6. REPAIRS MASONRY FACILITY.
A1F.5.6.7. REPAIRS STUCCO OR PLASTER FACILITY.
A1F.5.6.8. REPAIRS CERAMIC OR QUARRY TILE.
A1F.5.6.9. PERFORMS METAL WORK.
A1F.5.7. REPAIRS STORM DRAIN.
A1F.5.8. REPAIRS FENCE.
A1F.5.9. REPAIRS DRIVEWAY, PARKING LOT, AND STORAGE AREA.
A1F.5.10. REPAIRS SIDEWALK, BIKE, AND JOGGING SURFACE.

A1F.6. PERFORMS REAL PROPERTY ALTERATION:

A1F.6.1. ALTERS BUILDING UTILITY SYSTEM:
A1F.6.1.1. ALTERS FIRE PROTECTION SYSTEM.
A1F.6.1.2. ALTERS LOW VOLTAGE ELECTRICAL SYSTEM.
A1F.6.1.3. PERFORMS METAL WORK.

A1F.6.1.4. ALTERS HVAC SYSTEM.
A1F.6.1.5. ALTERS ELECTRICAL APPLIANCE OR EQUIPMENT.
A1F.6.2. ALTERS INTERIOR FACILITY:
A1F.6.2.1. ALTERS STRUCTURE.
A1F.6.2.2. ALTERS CONCRETE FACILITY.
A1F.6.2.3. ALTERS MASONRY FACILITY.
A1F.6.2.4. ALTERS STUCCO OR PLASTER FACILITY.
A1F.6.2.5. ALTERS CERAMIC OR QUARRY TILE.
A1F.6.2.6. ALTERS LOW VOLTAGE ELECTRICAL SYSTEM.
A1F.6.2.7. PERFORMS METAL WORK.
A1F.6.2.8. ALTERS HVAC SYSTEM.
A1F.6.3. ALTERS EXTERIOR FACILITY:
A1F.6.3.1. PERFORMS STRUCTURAL ALTERATION.
A1F.6.3.2. ALTERS CONCRETE FACILITY.
A1F.6.3.3. ALTERS MASONRY FACILITY.
A1F.6.3.4. ALTERS STUCCO OR PLASTER FACILITY.
A1F.6.3.5. ALTERS CERAMIC OR QUARRY TILE.
A1F.6.3.6. ALTERS PLUMBING FIXTURE.
A1F.6.3.7. ALTERS LOW VOLTAGE ELECTRICAL SYSTEM.
A1F.6.3.8. PERFORMS METAL WORK.
A1F.6.3.9. ALTERS CROSS-CONNECTION, CONTROL, AND BACKFLOW.
A1F.6.3.10. PERFORMS MINOR PAINTING.
A1F.6.3.11. ALTERS IRRIGATION SPRINKLER SYSTEM.

A1F.7. PERFORMS REAL PROPERTY CONSTRUCTION:

A1F.7.1. OPERATES EQUIPMENT TO SUPPORT COMMUNICATION SCHEMES.
A1F.7.2. PERFORMS STRUCTURAL CONSTRUCTION:
A1F.7.2.1. CONSTRUCTS FACILITIES.
A1F.7.2.2. INSTALLS UTILITY SYSTEMS.
A1F.7.2.3. OPERATES EQUIPMENT.
A1F.7.3. CONSTRUCTS ROAD.
A1F.7.4. CONSTRUCTS FENCE.
A1F.7.5. CONSTRUCTS DITCH, CULVERT, STORM DRAIN, AND SUB-SURFACE DRAIN.
A1F.7.6. CONSTRUCTS CURB OR GUTTER.
A1F.7.7. CONSTRUCTS DRIVEWAY, PARKING LOT, OR STORAGE AREA.
A1F.7.8. CONSTRUCTS SIDEWALK, BIKE, OR JOGGING SURFACE.